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DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR 1983

ORIGINAL

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS, HOUSE OF REPRESENTATIVES

NINETY-SEVENTH CONGRESS

SECOND SESSION

SUBCOMMITTEE ON THE DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES

SIDNEY R. YATES, Illinois, *Chairman*

CLARENCE D. LONG, Maryland
JOHN P. MURTHA, Pennsylvania
NORMAN D. DICKS, Washington
LES AuCOIN, Oregon
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FREDERICK G. MOHRMAN, D. NEAL SIGMON, and KATHLEEN R. JOHNSON, *Staff Assistants*

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Bureau of Land Management	311
Forest Service	535

Printed for the use of the Committee on Appropriations

COMPLETED

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DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES APPROPRIATIONS FOR 1983

WEDNESDAY, MARCH 31, 1982.

GEOLOGICAL SURVEY

WITNESSES

DANIEL MILLER, ASSISTANT SECRETARY, ENERGY AND MINERALS
DALLAS PECK, DIRECTOR, U.S. GEOLOGICAL SURVEY
DOYLE FREDERICK, ASSOCIATE DIRECTOR, U.S. GEOLOGICAL SURVEY
HILLARY A. ODEN, ASSISTANT DIRECTOR FOR PROGRAMS
BRUCE B. HANSHAW, ACTING ASSISTANT DIRECTOR FOR RESEARCH
ROBERT L. WESSON, ASSISTANT DIRECTOR FOR RESOURCE PROGRAMS
JAMES F. DEVINE, ASSISTANT DIRECTOR FOR ENGINEERING GEOLOGY
EDMUND J. GRANT, ASSISTANT DIRECTOR FOR ADMINISTRATION
PHILIP COHEN, CHIEF HYDROLOGIST
RUPERT SOUTHARD, CHIEF, NATIONAL MAPPING DIVISION
ROBERT M. HAMILTON, ACTING CHIEF GEOLOGIST
GENE THORLEY, CHIEF, OFFICE OF EARTH SCIENCES APPLICATIONS
PERRY PENDLEY, ACTING DIRECTOR OF MINERALS MANAGEMENT SERVICE
JOSEPH W. GORRELL, DIRECTOR OF BUDGET, DEPARTMENT OF THE INTERIOR
JOHN B. ROBERTSON, U.S. GEOLOGICAL SURVEY, WATER RESOURCES DIVISION, CHIEF, OFFICE OF HAZARDOUS WASTE HYDROLOGY
ROY SAMPSEL, DEPUTY ASSISTANT SECRETARY, BIA

Mr. YATES. Mr. Reporter, show the hearing coming to order.

This is the hearing on the U.S. Geologic Survey appropriation for fiscal year 1983. Appearing in support of that appropriation is Assistant Secretary Daniel Miller, Mr. Peck, Director of the Geological Survey, Mr. Frederick, Associate Director, Mr. Oden, Assistant Director for Programs. Hold up your hand, will you, wherever you are? Thank you. Mr. Hanshaw. Thank you, Mr. Hanshaw. Mr. Wesson, aren't you the one who told us about the volcanoes?

Mr. WESSON. No, we brought in a new team for you, Mr. Chairman.

Mr. YATES. All right. Mr. Devine. I remember Mr. Devine. Mr. Grant. Mr. Cohen. I remember Mr. Cohen. Mr. Southard. Hello Mr. Southard. Dr. Hamilton. Mr. Thorley. And old faithful, Mr. Gorrell.

We have biographies to put into the record.

Mr. YATES. The biographies of Dr. Miller, Dr. Peck, Mr. Frederick, Mr. Oden, Mr. Hanshaw, Mr. Wesson, Mr. Devine, and Dr. Hamilton may go into the record at this point.

[The biographies follow:]

DANIEL N. MILLER, JR.

ASSISTANT SECRETARY OF THE INTERIOR
FOR ENERGY AND MINERALS

NATIVE OF ST. LOUIS, MISSOURI

B.S. AND M.S. DEGREES IN GEOLOGY FROM MISSOURI SCHOOL OF MINES AND METALLURGY.

PH.D. (GEOLOGY) UNIVERSITY OF TEXAS, 1955.

WORKED 11 YEARS IN THE EXPLORATION AND RESEARCH PHASES OF THE PETROLEUM INDUSTRY IN THE TEXAS GULF COAST, NORTHERN ROCKY MOUNTAINS, AND CANADA, AS A SENIOR EXPLORATION GEOLOGIST.

SIX YEARS AS PROFESSOR AND CHAIRMAN OF THE DEPARTMENT OF GEOLOGY AT SOUTHERN ILLINOIS UNIVERSITY FROM 1963 TO 1969.

MOST RECENTLY HE SERVED 12 YEARS (1969-1981) AS STATE GEOLOGIST OF WYOMING AND DIRECTOR OF THE WYOMING GEOLOGICAL SURVEY.

IN ADDITION HE ALSO SERVED DURING THOSE 12 YEARS AS A MEMBER ON THE WYOMING OIL AND GAS CONSERVATION COMMISSION, AND WAS APPOINTED BY THE GOVERNOR TO OTHER STATE AND NATIONAL BOARDS. HE HAS ALWAYS BEEN ACTIVE IN PROFESSIONAL AFFAIRS AND IS A PAST PRESIDENT OF THE NATIONAL ASSOCIATION OF AMERICAN STATE GEOLOGISTS.

DR. MILLER HAS BEEN THE AUTHOR OR EDITOR OF MORE THAN 35 SCIENTIFIC, TECHNICAL, OR PROFESSIONAL PUBLICATIONS AND BOOKS ON GEOLOGY AND ENERGY AND MINERAL RESOURCES AND HAS BEEN THE RECIPIENT OF NUMEROUS PROFESSIONAL, ACADEMIC AND INDUSTRY HONORS AND AWARDS OVER THE PAST 25 YEARS.

DALLAS LYNN PECK

Born: Cheney, Washington, March 28, 1929

Education: Primary schools, Cheney and Spokane, Washington, and Missoula, Montana; Lewis and Clark High School, Spokane, 1947; California Institute of Technology, B.S. in geology with honors, 1951, M.S. in geology (concentration in mining geology), 1953; Harvard University, Ph.D. in geology (concentration in mining geology, 1960.

Professional Employment: Geologic field assistant, U.S. Geological Survey, part-time, 1951-53; Geologist, U.S. Geological Survey, 1954-77; Chief Geologist, U.S. Geological Survey, September 1977-81. Director, U.S. Geological Survey, September 1981-.

Professional Experience: Geology of western Oregon, and volcanic rocks of the western Cascade Range, 1954-59. Geology of the central Sierra Nevada, California, and granitic rocks of the Sierra Nevada Batholith, 1959-63, 1972-77. Hawaiian Volcano Observatory (activity of Kilauea Volcano and cooling processes in lava lakes), 1963-66. Assistant Chief Geologist for Experimental Geology (later, Geochemistry and Geophysics), 1967-72. Adviser to the National Science Foundation (Earth Sciences Advisory Committee), 1969-72; National Research Council (Fullbright-Hays Program, Advisory Screening Committee for Earth Sciences), 1974-77; National Research Council (Advisory Board to the Office of Earth Sciences), 1975-79; Sandia Laboratories (Magma Energy Project), 1975-76; Los Alamos Scientific Laboratories (Geosciences Advisory Panel), 1975-77; the Harvard University (Visiting Committee of the Board of Overseers to the Department of Earth Sciences), 1972-77; University of California, Berkeley, Dean of Graduate Studies, 1980; and Stanford University, School of Earth Sciences, 1982-. Representative to the Third General Meeting of the US-Japan Cooperative Sciences Program (Japan), 1965; to the Symposium of the International Association of Volcanology (New Zealand), 1965; to the Surtsey Research Conference (Iceland), 1967; to the Symposium on Geothermal Power (Italy), 1970; to the International School of Earth Sciences (Erice, Italy), 1973; and to the US-Japan Scientific Cooperative Conference on Volcano Energy (Hawaii), 1974. Delegate to Moscow (USSR) as a member of the US/USSR Joint Commission on Scientific and Technical Cooperation--Energy Working Group, 1972; U.S. Delegate to the assembly in Durham (England) of the International Association of Volcanology and Chemistry of the Earth's Interior, 1977.

Scientific and Professional Societies: American Association for the Advancement of Science (Fellow); American Geophysical Union (Fellow), (Past-President, Section on Volcanology, Geochemistry, and Petrology); Geological Society of America (Fellow and Council Member); Geological Society of Washington (Past-President); Mineralogical Society of America; Peninsular Geological Society; and the Society of Economic Geologists.

Honors: Department of the Interior Meritorious Award, 1970.
Department of the Interior Distinguished Service Award, 1979.
Presidential Meritorious Executive Award, 1980.

Doyle G. Frederick, Associate Director
U.S. Geological Survey, Mail Stop 102
National Center, Reston, Virginia 22092

Educational and Professional Experience

Bethel College, McKenzie, Tennessee, B.S. Mathematics, 1957. University of Cincinnati Graduate School, Dynamical Astronomy 1960-61. Federal Executive Institute, 1974.

As Associate Director of the Geological Survey, from March 1980 to present, he shares fully with the Director in all phases of the broad overall planning, directing and controlling of the varied scientific and technical programs of the Geological Survey.

Was Associate Chief, National Mapping Division since November 1979. Was responsible for the direction of scientific, technical, and administrative activities of the National Mapping Division in the conduct of the National Mapping Program. The program involves: the preparation of a series of general purpose maps of the United States; the preparation, use and dissemination of digital cartographic data; the operation of a National Cartographic Information Center; the participation in surveying and mapping technology; and the assistance of Federal, State, and local groups in the effective use, analysis, and display of maps and related data.

From 1957-1965, served as a research and staff officer in the areas of cartography, mathematics, and geodesy at the Aeronautical Chart and Information Center, St. Louis, Missouri. Served as a Program Manager in the Mapping Charting and Geodesy Directorate, Department of Defense, from 1965-1971, with responsibilities in the fields of geodesy, gravity, hydrography, airborne electronic and photographic surveys and photogrammetry. During 1972-1973, was the Department of Defense member on the Federal Mapping Task Force which conducted a broad study of civilian mapping, charting, geodesy and surveying activities in the Federal Government to determine how best to use available resources to meet overall national needs. From 1973-1979, served as the Chief, Office of Plans and Program Development, Topographic Division, U.S. Geological Survey. Responsible for the identification of requirements, formulation of plans, development of programs, allocation of funds, and staff management of the program. Also responsible for Federal mapping coordination, international activities and the National Cartographic Information Center.

Extra Curricular Activities

Has prepared and presented speeches and papers on many occasions for various technical societies and meetings relating to surveying and mapping technology programs. Capt. Bethel College Basketball, 1956-1957, Who's Who in American Colleges and Universities, 1957; Suggestion Award, ACIC, 1960; Superior Performance and Cash Award, ACIC, 1960; Outstanding Performance Award, DIA, 1967 and 1970; Meritorious Award/Outstanding, DMA, 1973; Meritorious Service Award, Department of the Interior, 1976; Superior Performance Award, USGS, 1979; Senior Executive Service Bonus Award, USGS, FY 1980; Distinguished Service Award, Department of the Interior, 1981; Senior Executive Service Bonus Award, USGS, FY 1981.

Biographical Sketch

Hillary A. Oden

Hillary A. Oden, Assistant Director for Programs
Office of the Director, U.S. Geological Survey

Born:

Lyons, Kansas

Educational and Professional Experience:

Mr. Oden received a Bachelor of Science degree in petroleum engineering in 1956 from the University of Kansas at Lawrence.

Previous to his present position, where he is responsible for providing leadership and coordination for the Geological Survey's program budgeting, analysis, and evaluation activities, Hillary Oden held a number of responsible positions with both the Director's Office and the Conservation Division (now Minerals Management Service) since joining the Survey in 1956. In 1959, he was placed in charge of the District Office in Billings, Montana, supervising lessee drilling and producing operations on public domain, acquired, and Indian oil and gas leases. In 1969, Mr. Oden was reassigned to the Gulf Coast OCS Regional Office in Metairie, Louisiana, as Senior Staff Engineer responsible for three district operational areas and the Regional Office Unitization Section. Two years later, he was reassigned to Division Headquarters in Washington, D.C., as Chief, Offshore Operations Section, in the Branch of Oil and Gas Operations. In 1973, he became Assistant Conservation Manager for the Western Region, then Acting Conservation Manager in 1976. From March through November of 1977 he served as Acting Associate Chief of the Division, until November of 1977 when he was selected as the Conservation Manager for the Western Region. He was selected as Associate Chief of the Division in May 1978, and served in that position until his appointment to the present position in October 1981, with the exception of the period from January through April 1981 when he served as Acting Assistant Director for Resource Programs, and April to July 1981 when he served as Acting Chief of the Conservation Division.

Publications and Honors

SES Meritorious Executive and SES Bonus in 1980; Department of the Interior Distinguished Service Award in 1979; Special Achievement Award in 1976; Department of the Interior Meritorious Service Award in 1973; Coauthor of Bidding and Production Relationships for Federal OCS Leases in 1973; Coauthor of Coordination on OCS Development in 1977; and Coauthor of Federal Geothermal Lease Bidding in 1978.

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Bruce B. Hanshaw

Acting Assistant Director for Research, U.S. Geological Survey

Born: Harrisburg, Pa., May 7, 1930

Married: May 29, 1954, to Penelope S. Miller, 2 children

Education: Massachusetts Institute of Technology, B.S., Geology, 1953, Teagle Foundation Scholar; University of Colorado, M.S., Geology, 1958; Teaching fellow, Harvard University, Ph.D., Geochemistry, 1962.

Professional Experience:
1953-54: U.S.A.E.C.; Exploration Geologist;
1954-56: U.S.; 1st Lt.; Battalion Asst. Operations Officer;
1956: U.S.A.E.C.; Exploration Geologist;
1956-58: University of Colorado, Graduate student;
1957-60: Petroleum Research Corp.; Denver, Colo.; Research Geologist.

Experience:
1959-62: Harvard University; Graduate student and Instructor;
1961-70: U.S. Geological Survey; Research Hydrologist
1970-72: U.S. Geological Survey; Deputy to Assistant Director for Research, Director's Office;
1973-1/4/82: U.S. Geological Survey, Research geochemist, WRD;
1/5/82-Present: Currently detailed as Acting Assistant Director for Research.

Committees and Panels: Served on and chaired numerous committees and panels including National Academy of Sciences-National Research Council; Department of Defense; Environmental Protection Agency; Departments of the Interior; Health, Education, and Welfare; National Science Foundation.

Professional Societies:
Geological Society of America; Fellow (1964), Councillor (1980-83);
American Geophysical Union;
Geochemical Society-Council Member (1968-72), and Environmental Geochemistry Committee (1973);
Geological Society of Washington;
American Chemical Society;
Sigma Xi;
Sigma Gamma Epsilon;
American Association for Advancement of Science; fellow (1981);
Comos Club.

Publications:
Author of more than 70 technical reports and papers, including book chapters and encyclopedia articles.

Honors:
White House Letter of Commendation (1972);
O.E. Meinzer Award for Distinguished Contributions to Hydrogeology by the Geological Society of America, Hydrogeology Division (1973);
White House Letter of Commendation (1980).

Biographical Sketch

Robert L. Wesson, Assistant Director for Resource Programs, Office of the Director, U.S. Geological Survey (USGS)

Born: San Francisco, California, February 26, 1944

Education: Primary and secondary schools, Spokane, Washington, Fresno, California and Seattle, Washington; Massachusetts Institute of Technology, S.B. in earth science, 1966; Stanford University, M.S. in geophysics, 1968, Ph.D. in geophysics, 1970.

Professional Employment: Geophysicist, USGS, 1970-present. Studies of seismicity and crustal structure of central California, 1970-72. Analysis of aftershocks of San Fernando earthquake, 1970-72. Supervision of data analysis and interpretation from central California seismograph network for seismic zonation and earthquake prediction, 1972-76. Field studies for earthquake prediction, Tadzhikistan, USSR, 1974-77. Deputy for Earthquake Mechanics and Prediction, Office of Earthquake Studies, 1976-78. Chief, Office of Earthquake Studies, 1978-80. Assistant Director for Research, 1980-81. Assistant Director for Resource Programs, 1981-present.

Scientific and Professional Societies: American Association for the Advancement of Science, American Geophysical Union, Earthquake Engineering Research Institute, Geological Society of America, Seismological Societity of America. Registered Professional Geophysicist.

Honors: U.S. Geological Survey-National Research Council Postdoctoral Research Associate, 1970-72. Member, Organizing Committee, UNESCO Conference on Earthquake Prediction, 1977-79. Chairman, U.S. side, U.S.-USSR Working Groups on Earthquake Prediction, 1978-present

Biographic Data on James F. Devine

Born	Westernport, Maryland; May 19, 1934
Education	Primary and secondary schools in Maryland: West Virginia University, B.S. in Geology with mathematics minor and mechanical engineering specialty; Earthquake Engineering (short courses) at: Univ. of Calif., Berkeley; UCLA; MIT
Professional Employment	Oceanographer, U.S. Coast and Geodetic Survey, 1958; Geophysicist, U.S. Coast and Geodetic Survey, 1958-1961; Research Geophysicist, U.S. Bureau of Mines, 1961-1967; Research Geophysicist, National Oceanic and Atmospheric Administration, 1967-1973; Geophysicist, U.S. Geological Survey, 1973-1980; Assistant Director for Engineering Geology, August 1980 to present
Professional Experience	Installed, operated, and interpreted recordings of tide gages and current meters, 1958; installed, operated, tested, modified, and calibrated all types of seismographs and associated electronic gear; conducted field research on seismic waves from earthquakes, underground nuclear detonations, rocket launches, and chemical explosions, 1958-1961. Project leader of team that conducted field research on air blast and ground vibrations from quarry blasting, 1961-1967; project leader of team that conducted a wide variety of studies of ground and structural responses to earthquakes and explosives, and performed seismological reviews of applications for licenses to construct and operate nuclear reactors and provided testimony at licensing proceedings, 1968-1973; Deputy Chief for Engineering, Office of Earthquake Studies and coordinator with the Nuclear Regulatory Commission for all USGS geologic and seismologic analyses of reactor site applications; consequently, has had direct review role and/or coordinating role for over 100 nuclear power plant applications; coordinated technical reviews of other critical structures such as liquified natural gas facilities and dams, 1973-1980; Assistant Director for Engineering Geology, 1980.
Scientific and Professional Societies	Seismological Society of America; New York Academy of Science; AIME, Society of Mining Engineers; Earthquake Engineering Research Institute.
Honors	USGS Meritorious Service Award, 1978. Registered Professional Geologist/Geophysicist in Idaho.

February 1982

Robert M. Hamilton, Acting Chief Geologist

Degrees

1958	Geophysical Engineer, Colorado School of Mines, Golden, CO
1962	M.A., University of California, Berkeley, CA
1965	Ph.D., University of California, Berkeley, CA

Honors

Socony-Mobil Scholarship (1957-58)
Cecil H. Green award in geophysics (1958)
President of Tau Beta Pi Honorary Engineering Fraternity (1957-58)
Pan American Petroleum Foundation Fellow (1963-64)
Meritorious Service Award - Department of the Interior (1978)
Who's Who in America, American Men and Women of Science

Professional Memberships

Seismological Society of America (Board of Directors 1979-82)
Eastern Section SSA (Chairman 1981-2)
American Geophysical Union (Secretary of Seismology Section 1978-80; Candidate for President of Seismology Section 1980)
Geological Society of America (Fellow)
American Association for the Advancement of Science
Earthquake Engineering Research Institute
Society of Exploration Geophysicists

Career Experience

Dr. Hamilton's career in seismological research began in the New Zealand Department of Scientific and Industrial Research in 1965-1968. In 1968 he started his career with the Geological Survey in the Office of Earthquake Research and Crustal Studies undertaking geophysical investigations on 1) the relations of the elastic properties of rocks to the propagation of seismic waves in the Earth and 2) regional seismicity. In 1972 he became Deputy Chief for Earthquake Geophysics in the Office of Geochemistry and Geophysics. In 1973 the Office of Earthquake Studies was created as a result of the merger of NOAA's earthquake programs with those of the USGS. At that time Dr. Hamilton was promoted to the position of Chief, Office of Earthquake Studies, and he was instrumental in the organization of that office. During his tenure as Chief, Office of Earthquake Studies, he managed a staff of about 300 professional and support personnel studying research problems such as seismicity, Earth strain, rock mechanics, heat flow, earthquake mechanisms, ground motion, seismic risk assessment, and mapping and evaluation of earthquake hazards. He also emphsized the application of research results at all levels of Government, in the design professions, and in industry. He returned to research in the Office of Earthquake Studies in 1978. Since that time, Dr. Hamilton has become known as an expert on the causes of seismicity in the Eastern United States, giving many invited papers at workshops and conferences in the past 4 years. He pioneered the utilization of seismic reflection profiles in the Mississippi Valley area to define seismogenic zones. His research results are utilized in the siting of critical facilities in the Eastern United States.

Mr. YATES. We have a statement by Dr. Miller followed by the statement of Dr. Peck which may go into the record.

[The statements of Daniel Miller and Dallas Peck follow:]

Statement of Daniel N. Miller, Jr.
Assistant Secretary for Energy and Minerals
Department of the Interior
before the
House Subcommittee on Appropriations
for the Department of the Interior and Related Agencies
March 31, 1982

Mr. Chairman, I am pleased to appear before you today to present a brief overview of the Administration's 1983 Budget priorities for the Energy and Minerals bureaus. The respective Directors of the Geological Survey, Minerals Management Service, Bureau of Mines and Office of Surface Mining will present more detailed statements commencing today with the statements by the Directors of Geological Survey and Minerals Management Service.

The Minerals Management Service was established by Secretarial Order No. 3017, which was signed on January 19, 1982. The Minerals Management Service is the former Conservation Division of the Geological Survey, and is funded under the Conservation of Lands and Minerals budget activity within the appropriation for Surveys, Investigations and Research. The Acting Director of that Service will discuss the 1983 Budget for the Conservation of Lands and Minerals activity.

The overall FY 1983 Budget for the Energy and Minerals bureaus is $803.2 million in new budget authority. This is a $5.5 million, or a less than one percent, reduction from the FY 1982 current estimate of $808.7 million and is a $23.3 million, or less than three percent, reduction from the 1983 Base estimate of $826.5 million.

Within these overall totals, however, there are significant shifts of resources among the Bureaus as shown in the following table:

Budget Authority
$ Millions

	1982 Est.	1983 Base	1983 Est.	Change from 1983 Base to 1983 Est. $	Change from 1983 Base to 1983 Est. %
Geological Survey	374.4	392.9	389.4	-3.5	-0.9
Minerals Management Service	122.3	120.5	128.5	+8.0	+6.6
Subtotal GS/MMS	496.7	513.4	517.9	+4.5	+0.8
Bureau of Mines	151.4 A/	151.9	125.5	-26.4	-17.3
Office of Surface Mining	160.6	161.2	159.8	-1.4	-1.0
Total	808.7 A/	826.5	803.2	-23.3	-2.8

A/ Includes a 1982 supplemental for $4.1 million plus $0.6 million transferred from the Office of the Secretary.

Note: All comparisons of amounts for programs that are used in this statement are between the 1983 base and the amounts recommended in the President's 1983 Budget.

Further, within the overall total for each bureau we are recommending funding for important initiatives through a redirection of budget resources. These initiatives reflect the Administration's recommendations for the highest priority uses of our budget resources.

In developing this budget we placed highest priorities on programs and activities which would:

-- reduce our dependence on foreign sources for energy and minerals by development of our own natural resources;

-- ensure a full and fair return to the American public and to the Treasury;

-- ensure that States have the resources to regulate and then reclaim lands undergoing surface mining; and

-- increase research, especially in the fields of strategic and critical materials, acid rain and toxic wastes.

Specifically the highest priority energy and minerals increases are for the following programs and activities:

-- Minerals Management Service and Geological Survey combined funding to support Outer Continental Shelf oil and gas leasing is increased by $3.8 million from $85.1 million to $88.9 million. These increases in budget resources are essential to support the accelerated Outer Continental Shelf 5-year leasing program which is America's best hope of reducing our dependence on foreign energy resources.

-- Minerals Management Service royalty management is increased by $6.8 million from $15.1 million to $21.9 million to provide funding for some of the most critical steps needed to improve that archaic system. Additional budget resources may be required to implement all of the 60 recommendations of the Linowes Commission. We intend to meet or exceed the goals of all those recommendations in order to ensure that the American people receive their full and fair return from the development and sale of their resources. Therefore, priority consideration now is being given to potential funding increases for royalty management in both 1982 and 1983.

-- Minerals Management Service funds in the amount of $1.5 million are recommended to be redirected in the Federal and Indian lands oil and gas program to provide for more frequent and thorough inspections of producing wells and related treatment facilities while conducting random inspections aimed at reducing the unauthorized removal of oil from Federal and Indian leases.

-- Office of Surface Mining grants to States in total, for both regulation and reclamation, are increased by $28.4 million, or more than one-third, from $83.5 million to $111.9 million as the States achieve primacy in both their regulatory and the mined land reclamation programs. Further, the President's Budget makes clear that if States obligate reclamation grant funds at a faster rate than now projected, favorable consideration would be given to a 1983 supplemental.

-- Bureau of Mines program funding for research on strategic and critical materials is increased by $1.6 million from $21.6 million to $23.2 million. It should also be noted that the current Mineral Resources Technology base for 1983 reflects an increase of $6.4 million above the original 1982 Budget for research on critical and strategic materials by shifting resources from other areas. Finally, there is a $1.3

million increase for Geological Survey research efforts to assist in developing new methods for identifying deposits of these minerals. These increases for strategic and critical materials research all are aimed at reducing our dependence on foreign sources of supply and are in accordance with the mandate of Congress under the Materials and Minerals Policy, Research and Development Act of 1980.

-- There are other increases throughout the budget for mineral resource surveys, applied and basic geologic research, Outer Continental Shelf reserve inventory, oil and gas resource information and the Barrow Gas Field, all of which I also strongly recommend.

To achieve the increases recommended in these vital programs, it was essential that we fashion reductions in other programs to be consistent with the overall austerity of the President's 1983 Budget. These reductions are achieved through a number of means including:

-- greater reliance on industry or State and local government funding;

-- a new approach under which Bureau of Mines research and development efforts are focused on high-risk projects with long-term payoffs--the type research unlikely to be undertaken by the private sector but which is of benefit to all Americans; and

-- deferral of otherwise desirable programs until there is a more complete economic recovery.

Specific programs recommended for major reductions or termination include the following:

-- Bureau of Mines Mineral Institutes Program which is recommended for zero new funding compared to the $9.2 million appropriated in FY 1982. No new funding is requested because we believe these institutes are not uniquely Federal and, consequently, they have available to them other sources of public and private support;

-- Office of Surface Mining funded Federal reclamation projects are reduced by $18.7 million from $28.1 million to $9.4 million paralleling an increase of $19.4 million in reclamation grants to the States from $59.1 million to $78.5 million. The remaining Federal funds will be limited to emergency projects.

-- Bureau of Mines Health and Safety and Environmental Research is recommended to be reduced from $57.9 million to $44.1

million, or a reduction of $13.8 million. The reductions in these programs reflect the policy decision to focus Bureau research on high-risk projects with long-term payoff. Industry has a powerful regulatory and economic incentive to carry out with its own resources the research we're cutting back in these areas.

-- There are other reductions based on our view that these Federal activities could be offset by efforts on the part of State or local government or industry. In addition, in the face of austerity budgets and national concern regarding deficits, some ongoing activities must be funded at reduced levels--at least at this time. Examples of these kinds of reductions include: earthquake and volcano hazards research; uranium and thorium, geothermal, and oil shale investigations; Federal coal drilling; and the mineral information program.

From this brief summary of major funding changes it is clear that the budget for the Energy and Minerals bureaus reflects the austerity of the President's overall 1983 Budget. However, it also is clear that it reflects the allocation of budget resources to provide substantial increases for programs where there are urgent funding requirements with the greatest return to the American people.

The results of the combined effects of overall reductions in the totals while funding urgent increases are widespread reductions over many programs. In recognition of these results, steps are being planned throughout the energy and minerals programs to assure a continuity of efforts--even though it now will clearly take longer than previously was planned to complete many projects.

I believe the 1983 budget for Energy and Mineral bureaus represents a thoughtful allocation of limited budget resources in the context of the President's efforts to strengthen the Nation's economy. The budget for these bureaus merits favorable action by the Congress and I recommend it to you.

STATEMENT OF DR. DALLAS L. PECK, DIRECTOR, U.S. GEOLOGICAL SURVEY DEPARTMENT OF THE INTERIOR, BEFORE THE HOUSE SUBCOMMITTEE ON APPROPRIATIONS FOR THE DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES

March 31, 1982

Mr. Chairman and Members of the Committee:

It is a pleasure to have this opportunity to present the U.S. Geological Survey's budget proposals for Fiscal Year 1983. The budget request for the Geological Survey is $379,075,000 of the $507,577,000 within the Surveys, Investigations, and Research appropriation reflecting a net programmatic decrease of $7,750,000 from the FY 1983 base. The Digital Cartography request is proposed as a separate account which would establish a revolving fund with the proposed FY 1983 appropriation of $3,873,000 serving as the initial operating capital for the fund. Finally, funds in the amount of $6,400,000 are requested for a new account, Barrow Area Gas Operation, Exploration, and Development. This activity was previously funded under the Exploration of National Petroleum Reserve in Alaska appropriation.

You have our detailed Budget Justifications book which explains the proposed major funding changes from the current year's budget. Accordingly, I would like to use my opening statement to speak to certain aspects of the Survey's programs and activities rather than attempting to cover all the budgetary changes we have proposed and which will be examined in detail during the course of these hearings. In view of Secretary Watt's action transferring what were the functions of our Conservation Division to the newly created Minerals Management Service, our presentations will deal only with the remaining programs covered in the Justifications book; namely those having to do with mapping, geologic and hydrologic investigations, water, energy, and mineral resource assessment, geologic hazards reduction, and the operation and maintenance of the gas fields at Barrow, Alaska.

Minerals and Energy Leasing

As you are aware, Secretary Watt established the Minerals Management Service as an interim move to focus more attention on the collection of royalties for mineral leases on Federal and Indian lands. In order to maintain organizational and administrative efficiency, the Secretary established the Minerals Management Service (MMS) consisting of the entire Conservation Division of the U.S. Geological Survey for the time being. Prior to the end of the year, a decision will be made regarding organizational location of the royalty management function and the other functions transferred by the Secretarial Order.

The Geological Survey will continue its functions of providing regional resource appraisals and identifying and characterizing geologic hazards that may affect mineral operations on Federal and Indian leases both on and offshore. These activities are closely supportive of and essential to the work done by the Bureau of Land Management (BLM) and the MMS in the preparation of mineral lease sales and the subsequent supervision for operations under leases granted.

Onshore, BLM's land-use planning cycle uses the Geological Survey's timely appraisals of prospective coal lands. For Fiscal Year 1983, we are asking for $14.1 million, an increase of $1.5 million to initiate eight more 1:100,000 coal resource appraisals to enable BLM to meet the deadlines required for decisionmaking on leasing in its first priority areas.

Offshore, the accelerated 5-year lease sale schedule proposed by Secretary Watt will mean very much larger lease offerings in the future than we have known in the past--perhaps as much as 10 million acres in some cases. The large increase in size of lease offerings, which will include acreage in water as deep as 8,000 feet and in remote areas such as the Bering Sea, creates a demand for information about potential resources and potential geohazards in areas where data are scarce or nonexistent. Our requirements for data will, therefore, be substantially larger than they have been in the past. We are accordingly seeking $1.05 million in additional funds for Fiscal Year 1983 which will provide $21.8 million for Offshore Geologic Surveys, enabling us to provide the near-term resource and geohazards data that will be needed to support the OCS leasing schedule. The data will also be used to update and revise our biennial appraisal of OCS oil and gas resources that will be due in 1984 under the OCS Lands Act Amendments.

Barrow Area Gas Fields

The two gas fields that support the Alaskan Native community in the Barrow area have in the past been operated and maintained by the contractor who operated the Naval Arctic Research Laboratory (NARL) at Point Barrow, with the costs shared by the Office of Naval Research and Geological Survey. The NARL has been decommissioned by the Navy and is in caretaker status. Its future is under study, as mandated by the Alaska National Interest Lands Conservation Act, and a decision by the Secretary of the Interior is currently before the Congress. We consider it a virtual certainty that the Geological Survey will be required to assume responsibility in Fiscal Year 1983 for the full cost of operating and maintaining the fields and associated base camp facilities, estimated to be $6.4 million, or $4.2 million over the $2.2 million funded for the Survey's portion of the costs in Fiscal Year 1982. I should point out that our costs for the current year are in fact likely to be about $7.5 million due to the reduction in Navy support for the base camp. We plan to make up the difference by proposing the reprogramming of funds from the NPRA Exploration Drilling Program.

Aiding the Search for Strategic and Critical Minerals

The problem of petroleum import dependence has been with us for nearly a decade and is very real to all of us who have waited impatiently in gas lines. The problems threatening assured and stable supplies of strategic and critical minerals are of no less concern to our national defense and industrialized economy, but they are difficult to sense and communicate. The average American doesn't wait in lines to buy a quarter pound of cobalt, an ounce of platinum, a ton of tin or a railroad car full of manganese.

But earth scientists everywhere are aware of a potential metals crisis, and we in the Geological Survey are responding by giving increased attention to programs aimed at enhancing our domestic metal supply position.

One line of action follows the widely accepted axiom of miners everywhere, namely "new ideas produce new deposits." New ideas come from research, and we have a heavy commitment to research on the occurrence of strategic and critical minerals. One research effort that pays dividends is in what geologists call the development of mineral deposit models. Such models are basically enumerations of the geologic, geochemical and geophysical features that one can observe or measure and that indicate the presence of concealed ore bodies. We have recently published one such model for the cobalt-bearing lead deposits of southeast Missouri, and it points to areas of high potential that are not yet explored by industry drilling. We are at work on new cobalt/nickel models applicable to the Eastern United States, on platinum models applicable to Montana, Alaska, and Antarctica, and on a revolution in our understanding of manganese deposits formed 100 million years ago. This last development strongly suggests the need to search for manganese in the States of Alabama and Georgia and the adjacent lower Mississippi Valley. We have proposed $5.7 million, an increase of $1.3 million in FY 1983, in our Strategic and Critical Minerals Program to continue these studies and extend our efforts to major research activities on tin in New Mexico, cobalt in Idaho, aluminum in Wyoming and Colorado, and vanadium at several locations in both the Eastern and Western States.

Another approach we are pursuing is the systematic assessment of the mineral potential of the Nation's lands, articulated by our two ongoing programs, the Alaska Mineral Resources Assessment Program (AMRAP), and the Continental United States Mineral Assessment Program (CUSMAP). The focus of these programs for the past several years has been on Alaska and the highly mineralized areas from the Rocky Mountains to the Pacific Coast. Under these programs we extend and supplement the existing information with the results of our own geologic mapping, geochemical sampling, geophysical surveys, and numerous laboratory studies. The principal product is a series of 1:250,000-scale quadrangle folios that include geologic, geochemical, geophysical, and interpretive mineral resource maps accompanied by a written text. The quad studies are supported by detailed studies of particular mining districts.

The Alaska National Interest Lands Conservation Act (ANILCA) with its requirement for a complete mineral resource assessment of all public lands in that State made it both necessary and possible for us to accelerate and expand our AMRAP program, from a previous level of $5 million a year to $8.7 million. We are requesting an additional $0.5 million in FY 1983 to continue our work at a level which will insure that the requirements of ANILCA are met in a timely manner. This involves the completion of studies of the so-called "middle ground" in northern Alaska between the National Petroleum Reserve and the Arctic National Wildlife Refuge by 1988, and completion of the entire Alaskan assessment program by the year 2000.

We are also requesting an increase of $0.5 million in FY 1983 over the current level of $5.0 million for the CUSMAP program to enable us to complete our assessments of 20 of the highest priority quadrangles in the program by 1987.

Our search will be focused on areas known or inferred to contain a number of metals for which we are heavily dependent on overseas sources: cobalt, chromium, manganese, mercury, tantalum, tin, and tungsten.

Toxic Wastes - Ground Water Contamination

Over the last few years, national attention has focused increasingly on the threat to ground-water supplies posed by buried toxic wastes. The overall problem includes household septic systems, municipal waste landfills, leaking oil pipelines and storage tanks, illicit dumping, and various private waste depositories that leak thousands of tons of contaminants into the Nation's ground-water supplies every year.

The U.S. Geological Survey's Toxic Waste Program is designed to acquire a knowledge of the behavior of chemical contaminants in ground water that will provide a basis to develop geologic and hydrologic guidelines for the selection, design, and operation of toxic waste disposal sites and to improve or enhance techniques for remedying ground-water contamination. The program is related to and benefits from a number of other Survey programs that have to do with ground water, including Regional Aquifer Systems Analyses, Nuclear Energy Hydrology, and Nuclear Waste Disposal Investigations. The $4.4 million requested for Fiscal Year 1983, an increase of $3.5 million, will enable us to begin research to understand the processes affecting migration and reaction of toxic contaminants in ground water and how these processes can be simulated by models and to begin developing the methods and techniques required to assess the extent of ground-water contamination. It will also permit us to develop the earth science information needed to determine and evaluate processes and procedures that may be used to immobilize or neutralize contaminants in ground water.

Acid Rain

The Geological Survey has been investigating the chemistry of rain for the past three decades, and since 1976 we have done a great deal of work in data collection and research on acid rain through our Federal/State Cooperative Program. We have more than 30 studies currently under way in this effort in New York, Pennsylvania, Ohio, Colorado, and Washington.

Despite our own investigations and those of many other Federal and State agencies and the academic community, I think it is fair to say that the state of existing knowledge of the causes and effects of the acid rain phenomenon is still inadequate to form a reliable basis for effective remedial actions. We were pleased to see the enactment of the Acid Precipitation Act of 1980 which provides the framework for a coordinated interagency investigation of the acid rain problem, and we are beginning a program this Fiscal Year that will be a part of the National Acid Precipitation Assessment Plan and coordinated by the Interagency Task Force charged with carrying out the plan.

Among our initial efforts this year will be the establishment of 10 to 15 stations for monitoring the chemical composition of wet atmospheric deposition as part of the National Trends Network. We will also be working with other agencies in both the public and private sectors to incorporate up to 50 existing monitoring stations into the National Trends Network. We will also conduct research in ground and surface water chemistry, assist in identifying and classifying lakes and streams that are sensitive to the effects of acid rain, and develop a laboratory quality assurance program to support the National Atmospheric Deposition Program efforts and those of other agencies involved in acid rain studies.

We are requesting $2.4 million in Fiscal Year 1983, an increase of $1 million, to continue the planned expansion of this program with a view to having 30 atmospheric deposition monitoring stations operating, putting more existing monitoring stations into the National Trends Network, doubling our surface and ground water monitoring stations from 20 to 40, and increasing research on geochemical processes occurring in watersheds exposed to acid precipitation.

Collection of Information Needed for Water Management

The Geological Survey, through its Federal Program and its Federal/State Cooperative Program, gathers much of the fundamental information on the quantity and quality of the Nation's water resources that is used by Federal, State, and local agencies to manage those precious resources. As time goes by, specific information needs change and the information gathering programs must change and be strengthened accordingly. Increases totaling $1.5M have been requested for the two programs to facilitate development of the type of information available to meet these new needs. The requested funds will be used to strengthen our data-gathering efforts in support of the National Weather Service's flood-forecasting program, to improve data-collection activities of the national water-quality networks operated by the Geological Survey, and to expand the Survey's capabilities to address such serious water-quality issues and problems of mutual State and Federal concern as pollution of ground water by toxic wastes, water needs for energy resource development, and effects of water management decisions on river quality.

Wilderness Surveys

Since 1965 the Geological Survey, in cooperation with the Bureau of Mines, has been engaged in a program of mapping and surveys to determine the energy and mineral resource potential of Federal lands designated for inclusion in the National Wilderness Preservation System as prescribed by the Wilderness Act of 1964, by subsequent acts for Forest Service inventories, and by the Federal Land Policy Management Act (FLPMA) of 1976 for public lands managed by the Bureau of Land Management. We expect to complete work on national forest lands required by January 1, 1984, the date specified in the Wilderness Act. Mineral survey work on the lands under the Bureau of Land Management as defined by Section 603 of FLPMA will continue in FY 1983 under reimbursable agreement.

Digital Cartography

Our digital cartography program continues to grow to meet the rising demands of Federal, State and local agencies, as well as private sectors.

Our own National Coal Resources Data System, for example, will combine information in digital form for surface elevations, boundaries, and public land survey system corners with data regarding strippable and subsurface coal deposits. One use of this information will be to compute overburden and evaluate the economic feasibility of developing these coal resources.

The Bureau of Land Management is using digital cartographic data as a reference to assess management alternatives for grazing and timber management areas within the public lands and also as a base for a land records information system.

The Tennessee Valley Authority needs digital terrain data to conduct air pollution studies as part of its effort to monitor the effects of pollution from coal-fired electric generating plants. Terrain data are needed because the shape of the terrain affects wind direction and air turbulence, and thus has a major effect on the dispersion and diffusion of pollutants.

The Forest Service requires digital cartographic data to describe topography, transportation routes, drainage networks, and political boundaries to combine with information on fire fuel models, winds and vegetation types to predict the spread of fires and to direct fire fighting resources.

These and many other applications of digital cartographic data are indicative of the economic value that digital cartographic data have for users. The $3.9 million we are requesting for Fiscal Year 1983 under a new appropriation, Digital Cartography, is in effect a transfer from the appropriation Surveys, Investigations, and Research which has provided funding for our digital cartography program in the past. Should the proposed legislation to create a revolving fund to finance digital cartographic work be enacted, the money requested for Digital Cartography would become the initial operating capital for the fund. It is our expectation, as we gain experience in supplying digital cartographic products under the revolving fund, to be able eventually to establish price schedules that will recover the full cost of such products.

General Administration

The change in presentation of the General Administration budget activity reflects the discontinuation of assessment against all program elements as a means of financing the general administrative expenses program. The direct funding request of $18.8 million together with funds estimated at $5.4 million from reimbursements will fund the $24.2 million required to provide executive direction, administrative operations and Employee Compensation payments to the Department of Labor. As you know, the Secretary's Order establishing the Minerals Management Service also charges the Geological Survey to continue to provide the same administrative support services to the new organziation as were provided when it was within the Geolgical Survey.

Innovations

The work to create new models and concepts, collect the necessary data, and develop new hardware to solve these problems goes on constantly in the Geological Survey and elsewhere. We are particularly excited, for example, about the discovery made last year by Geological Survey scientists of minerals deposited on the ocean floor by hydrothermal springs along the Juan De Fuca Ridge about 250 nautical miles off the Oregon coast, where new crust is being formed by the upwelling of molten rock from the underlying mantle. The deposits were found at a water depth of 6,000 to 7,000 feet, and are rich in copper, zinc, lead, and silver. Similar deposits have been discovered by other U.S. scientists and the French at several other locations, suggesting that they may be common along other parts of the world-encircling suboceanic ridge system. Since the initial discovery of the sulfides, every expedition sent to seek out new sulfide deposits has been successful, indicating that our understanding of their occurrence is improving and that they are very abundant. Estimates of the value of these deposits are highly tentative, but indicate that those at the discovered sites are worth billions of dollars at current prices. These estimates need to be refined by conducting additional surveys of known deposits, conducting surveys to seek out new deposits and by coring to determine the thickness of the deposits. Of additional importance is that the deposits are similar in character to onshore deposits of these metals that are found in rocks of apparent oceanic origin in many parts of the world including California, Oregon, and Alaska. The Survey will resume its studies of the Juan De Fuca deposits in the fall of this year to obtain more definitive data on the extent of this potential resource and to gain further knowledge that may be useful in formulating exploration techniques for locating similar deposits on land.

Computerized information storage, manipulation, and retrieval is steadily displacing the bales of paper and acres of storage space we used to devote to written records and analyses. The Geological Survey maintains more than 200 separate data bases containing information on the Nation's water, mineral, and energy resources, as well as the vast amount of cartographic data entered through its digital cartography program.

One such data base is our National Coal Resources Data System (NCRDS), which we are using to gather and arrange in manageable form the vast amount of coal data already extant as well as data being generated as the result of ongoing coal investigations, both by the Survey and other agencies, particularly State Geological Surveys.

Phase I of the effort consisted of a summary or aggregated data on coal resources derived from existing noncomputerized resource files--the traditional published sources. These are useful for making quantitative assessments of coal by region, State, or county, but they say nothing about coal quality. Our Phase II, now under way, consists of point-source geologic data obtained from mines, core holes, and outcrops, and includes such information as coal bed and overburden thickness, moisture, sulfur, ash, trace-element content, and heating value. These data can be used to produce computer-drawn resource maps of various types, including coal quality distributions, as well as quantitative resource calculations. We are working with the Geological Surveys of the coal-bearing States to obtain these data for inclusion in our NCRDS.

Other innovations are possible by departing from conventional procedures in instances where timeliness justifies turning out something less than a fully finished product. One example is the provisional maps we have begun preparing to get more maps into the hands of users more quickly by shortening the production cycle. Provisional maps, so called because of their interim nature, are published in colors as are standard topographic maps, and show about the same amount of detail, but take less time to prepare. The principal difference is that the provisional map shows data compiled in the photogrammetric stage of production, that is, with some hand lettering, with some data unclassified by symbol, and with some temporal data such as crop lines and road scars unedited. It is an interim solution aimed at satisfying demands in a timely manner, in the expectation that the interim products will be converted to standard cartographic maps when this becomes feasible.

Using the provisional map approach will help us meet our objective of having the entire conterminous United States mapped in the 7.5-minute series by 1988. After this is accomplished, the provisional maps will be updated and will receive the full cartographic treatment. By that time digitized map data should be available to simplify and expedite the revision and map finishing processes.

Finding a Balance

One of the principal reasons that Secretary Watt gave for his decision to establish the Minerals Management Service was to permit the Survey to focus its undivided attention on its scientific mission. This we fully intend to do, and we are currently giving a great deal of thought within the Survey to the subject of how to allocate our resources to achieve the best balance between near-term and long-term goals, between the pursuit of pure science and the solution of practical problems.

This is no easy matter. You will appreciate that much of what we do is specific to certain stated requirements. Our efforts in applied research are often focused and directed by the need to solve practical problems as defined by Congress, the Executive Branch, or State agencies. We get paid in the form of appropriations, cooperative funding, and other sources to do certain things, and we don't have a large measure of choice about where we put our efforts.

But in many other areas of applied research we do indeed have the opportunity to determine the direction and intensity of our efforts, and this function of selection and emphasis applied to our research objectives is what our program management is all about. Every official from Branch Chief to the Director shares this responsibility for ascertaining as timely and accurately as possible the needs of our constituents and sponsoring the kinds of research that will meet those needs. We are examining ways to assure our continuing responsiveness in this important area.

Finally there is the matter of basic research--absolutely essential to our future effectiveness, yet so tenuously connected to any visible result that it is continually threatened by the need to accommodate the more pressing demands for solutions to current national problems.

To make sure that the Geological Survey maintains its fundamental strength in basic research, I have undertaken, with my associates, a careful analysis of the kinds of basic research the Survey needs to be doing now in order to meet the Nation's needs in the years ahead. In this review, we are examining carefully the opportunities for rapid progress--even breakthroughs--in understanding the Earth and its processes. We are looking at the future needs of the Nation for information about the Earth, its resources, and its characteristics. And we are seeking to identify the appropriate role of the Geological Survey to seize these opportunities and meet these needs relative to industry, State Geological Surveys, other Federal Agencies, and the academic community. In the process, we are seeking the views of the newly formed Geological Sciences Board of the National Academy of Sciences, an internal Geological Survey Research Committee, State Geological Surveys, academic private industry, and other groups. I am confident that such an analysis of the needs of opportunities for earth science research will provide a firm foundation for making short-term decisions about our long-term investments in research.

Mr. Chairman, this concludes my formal presentation. My associates and I will be pleased to answer any questions you and the other members may have.

Mr. Yates. Dr. Miller, Assistant Secretary, you are given the right to kick off.

Dr. Miller. Be glad to, sir.

Mr. Yates. All right. Please don't read your entire statement. That is in the record but give us the benefit of your wisdom.

STATEMENT OF ASSISTANT SECRETARY MILLER

Dr. Miller. I am pleased to be before this committee this morning, sir, to provide the information as requested. We are here to discuss the energy and minerals programs of the Department of the Interior. Under the E and M overall division of course, we have responsibility for the Geological Survey, the Minerals Management Service which was created in January of 1982 by Secretarial Order 3017, the Bureau of Mines and the Office of Surface Mining.

The people who are with me this morning have already been introduced. Let me start by just a gross generalization here about the E and M budget overall for 1983. The recommendation that has been made is $803.2 million which is, in effect, $5.5 million less than the 1982 appropriation, and some $23.3 million less than the 1983 base.

Within the total budget of each of our bureaus we are recommending fairly substantial redirection of priorities. The highest priorities for our programs and our activities can be summarized briefly: To reduce our Nation's dependence upon foreign sources of petroleum and minerals for the development of our own domestic resources; to insure fair financial return to the American people through the Federal Treasury; to insure that the States have sufficient funds, both to regulate as well as to reclaim those lands that have been subjected to surface mining; and to increase those types of research which are ranked as high risk or long term, especially research related to strategic and critical materials. We also conduct research, of course, on toxic wastes and such things as acid rain.

More specifically, the highest priority has been given in energy and minerals to the combined funding for the Minerals Management Service and Geological Survey to support the Outer Continental Shelf oil and gas leasing. This has been increased by $3.8 million as part of the accelerated 5-year leasing program which we believe is America's best hope of reducing our dependence on foreign sources of supply.

ROYALTY MANAGEMENT PROGRAM

The royalty management program of Minerals Management Service is increased by $6.8 million, primarily to provide for development of a new production accounting and auditing system, and to ensure the compatibility of the data from that system with the auditing and the financial system. Priority consideration is being given to potential funding increases for this program, both in 1982 and 1983.

Mr. Chairman, as you are well aware, this program—which has generated tremendous amounts of money—in 1971 generated only some $500 million of income into our Treasury; last year, however, it brought in $4 billion. This is by far the most important program that we have operating.

In conjunction with these actions, $1.5 million of Minerals Management Service funds are to be redirected in the Federal and Indian lands oil and gas programs to provide for more frequent and thorough inspections of producing oil and gas wells, as well as the leases on which they occur.

The Office of Surface Mining has grants to States for both regulation and reclamation, and these have been increased by $28.4 million, or more than one-third, as the States achieve primacy in both their regulatory and mined land reclamation programs. If States obligate reclamation grant funds at a faster rate than now projected, favorable consideration will be given to a 1983 supplemental.

In the Bureau of Mines program we have increased funding for research on strategic and critical materials by $1.6 million. The 1983 base reflects an increase of $6.4 million above the original 1982 budget for this research by shifting resources from other areas. These Bureau of Mines increases, and a corresponding Geological Survey increase of $1.3 million for strategic and critical materials research, are aimed at reducing our dependence on foreign sources of supply.

Now, to achieve the increases recommended in these programs it was essential that we make reductions in some other programs. These reductions are achieved primarily through the following steps. First, greater reliance upon industry and State government to provide funding.

Mr. **Yates**. That is a switch, isn't it? Ordinarily they rely on you.

Dr. **Miller**. Yes, sir, it is.

Mr. **Yates**. Is that a better approach?

Dr. **Miller**. I think it is, sir, yes. second, a new approach, under which the Bureau of Mines research and development efforts are more clearly focused on high-risk projects with long-term payoffs, the type of research that is unlikely to be undertaken by the private sector, but which is of benefit to all Americans.

Finally, the deferral of otherwise desirable programs until there is more complete economic recovery within the Nation.

MINERAL INSTITUTES

Specific programs recommended for major reductions or termination include the Bureau of Mines' minerals institutes program which is recommended for zero new funding. This is compared to $9.2 million which was appropriated in fiscal year 1982.

Mr. **Yates**. Where will its functions be taken up? You say zero appropriation?

Dr. **Miller**. Yes, sir.

Mr. **Yates**. What happens to its function?

Dr. **Miller**. The function will remain the same for this year, sir, but there is no appropriation for the future.

Mr. **Yates**. I see. Will no other activity in the Geological Survey will take over the functions of the Bureau of Mines minerals institutes program in the future?

Dr. **Miller**. No, sir.

Mr. **Yates**. All right.

Dr. **Miller**. We have taken this action because we believe that the institutes are not uniquely a Federal responsibility.

Mr. **Yates**. All right.

Dr. **Miller**. Consequently, they have available to them other sources of public and private support.

In the Office of Surface Mining we have Federal reclamation projects, and they have been reduced by $18.7 million which in turn parallels an increase of $19.4 million in reclamation grants to the States. The remaining Federal funds, about $9.4 million, will be for limited use on emergency projects.

Finally, the Bureau of Mines health and safety and environmental research programs are recommended to be reduced by $13.8 million. These reductions reflect our policy decision to focus research on high-risk projects with long-term payoffs.

Industry has both the regulatory responsibility, as well as the economic incentive to carry out these functions.

Mr. **Yates**. What does that mean, industry has the regulatory function? What regulatory function does industry have?

Dr. **Miller**. To provide for the safety of their employees, sir.

Mr. **Yates**. I see. Well, that is a strange word to use there. Regulatory ordinarily has a connotation of a police function to it, does it not?

Dr. **Miller**. I suspect that it does, sir.

Mr. **Yates**. All right.

Dr. **Miller**. The 1983 budget includes many other increases and reductions in individual programs which generally follow these policy guidelines, and they will be explained in more detail by the Bureau Directors.

I believe that the 1983 budget for energy and minerals bureaus represents a carefully prioritized allocation of budget resources within the context of the Department of the Interior and the President's efforts to strengthen the Nation's economy. I recommend it to you, sir, without reservation.

Mr. **Yates**. Without reservation.

Dr. **Miller**. Yes, sir.

Mr. **Yates**. Okay, Mr. Peck, what have you to say?

STATEMENT OF DIRECTOR PECK

Mr. **Peck**. I will start by saying it is a pleasure to have the opportunity to testify before the committee. Since my written statement has been submitted for the record I will limit my oral remarks to a brief summary of the more important points.

A decision was made in January this year by Secretary Watt to form the Minerals Management Service from what used to be the Conservation Division. This is an interim measure made specifically to improve the Department's control of the important role in the management program. The Secretary will make a final organizational decision later this year; we are particularly interested in those aspects related to resource evaluation and hazard assessment.

In the meantime, the Survey is continuing its function to provide regional resource appraisals in identifying and characterizing geological hazards associated with mineral operations on Federal lands, both onshore and offshore.

These activities are accomplished in support of both the Bureau of Land Management and Minerals Management Service. Work on onshore programs is associated mostly with the BLM need for appraisals of prospective coal leases.

Offshore, our efforts will be directed towards complying with the Secretary's 5-year lease schedule. Because we are going to be working in deeper water than before and in remote areas in the Bering Sea, and because of increased reliance on regional hazard studies, our work here will be substantially expanded over what it has been in the past.

We are asking for an increase this year for operation of the Barrow Gas Fields. This is a program that we think the chairman and Congress might want to examine very closely because we anticipate rapidly increasing costs.

We are stepping up our search for strategic and critical minerals because of the need of them and because of the tenuous nature of the supply, proposing a $1.3 million increase in 1983 to intensify our effort.

We continue to accomplish the systematic appraisal of the mineral potential of the Nation's lands. These activities are carried out under two programs, the so-called AMRAP program and CUSMAP program. AMRAP has been accelerated and expanded in response to the Alaska Natural Lands Conservation Act. As you are aware, this is an ongoing program for which we are requesting an additional $500,000.

Since 1965 the Survey and Bureau of Mines have been surveying the mineral resources of lands included in the Wilderness Preservation System. We expect to complete all work on National Forest System lands by January, 1984, the date specified in the Wilderness Act. We plan to present the Congress, by that date, a summary of the geology and resources of all the 800 areas.

Mr. YATES. How good a survey will it be?

Dr. PECK. It is a pretty good survey as a matter of fact.

Mr. YATES. All right. You have got enough resources to conduct it?

WATER RESOURCE INVESTIGATIONS

Dr. PECK. Yes. We plan to move strongly this year in the area of toxic waste disposal, which we think is very important. We are asking for a $3.5 million increase. We recognize that this is substantial in these times of fiscal austerity but we think the program is a serious one.

We are intensifying our efforts in the area of acid rain, a problem which has received increasing attention, especially in the eastern part of the country.

Mr. YATES. What activities are you intensifying?

Dr. PECK. Monitoring of acid precipitation, identifying lakes and streams which are particularly sensitive to acid precipitation, acid rain and acid snow. Working with a number of other Federal Agencies in a coordinated program aimed at a better understanding of what happens to aerosols, changes, how sensitive lakes are and how the surrounding land and soil affect the results.

Mr. YATES. Will you have adequate resources for that?

Dr. PECK. Yes, we are asking for a substantial increase to carry that out—$1 million, $1.5 million, something like that.

Mr. YATES. By the new standards, that is substantial?

Dr. PECK. Yes, sir. Last year during our budget hearings we discussed with you, at length, the national water assessment, with Mr. Cohen, and the role of the USGS. We have been giving these discussions a good deal of thought over the last year. We are moving to place ourselves in a position to answer more promptly and thoroughly questions of this nature. We are asking for a $1.5 million increase in the two programs, to supply the data to support these studies.

Our digital cartography program has been growing very well. We have ongoing programs now to use the system with the BLM, TVA and Forest Service.

The program is still in its infancy. We believe that the show of interest is indicative of the economic value of the program. During these times of soaring inflation and restrictive budgets, we need to use some innovative approaches in order to continue to provide the public with the needed map products in a timely fashion.

One example is provisional maps.

Mr. YATES. What does that mean, when your budgets are cut you have to find ways of still providing the information?

Dr. PECK. That is right. A good example of that we are very proud of is being carried out by our mapping division.

Mr. YATES. What are they doing?

Dr. PECK. We have started a new map series, provisional maps which are done much more cheaply and rapidly than the standard topographic maps.

Mr. YATES. Why didn't they do it before? Good question, isn't it?

Dr. PECK. Good question.

Mr. Southard.

Mr. YATES. Do you mean necessity is the mother of invention?

Mr. SOUTHARD. Yes.

Mr. YATES. All right.

Mr. SOUTHARD. Very well said.

Mr. YATES. You are going to have to be very inventive this year. Go ahead.

Dr. PECK. We are trying to be so, Mr. Chairman.

Mr. YATES. Okay. As a matter of fact, last year, I think it was BLM, came in with a very much reduced budget they talked about streamlining their procedures. The committee asked, "How will you be able to carry on your functions?" They said, "Well, we will have to be smarter, Congressman."

I assume you will have to be smarter too?

Dr. PECK. We are all trying very hard.

Mr. YATES. Well, okay. You have many advanced degrees. Perhaps you can do it.

Dr. PECK. And a very fine staff. You are aware, I am sure, of the discovery made last year of sulfides along the Juan De Fuca Ridge. Initial indications are that these deposits are very large size and may potentially be of very large value. The deposits are similar to ancient deposits on land.

By studying these deposits we learn more about how deposits on land were formed and hence, how to search for them. We will continue those studies this fall. One of the principal reasons the Secretary gave for establishing the Minerals Management Service was it would allow the Survey to focus attention more on scientific research, so we fully intend to do that.

Some of this is applied research, some required by mandates from Congress and the Department, but there is some latitude, and we are looking very carefully at this. Another is basic research, that is essential for us to do the job better in the future. We are going through a pretty intense internal process in working with the National Academy in identifying the areas of basic research that deserve emphasis because they may provide breakthroughs or more efficient ways of doing our job in the future.

I am sure that is going to help in the future. That is essentially the end of my summary, sir.

Mr. **Yates**. Okay, good statement.

USGS ANNUAL REPORT

All right, we look at your annual report for 1981. On page one, we see the following: "Many of the Survey's ongoing commitments rapidly began to merge with newer ones as a result of the new administration's pledge to, among other things, increase private access to Federal lands for mineral and energy development, reduce the regulatory role of the Federal Government."

Now, how is that done in connection with GS?

Dr. **Peck**. Well, the annual report and budget document itself was prepared over the last year before the Conservation Division was split off as the Minerals Management Service.

Many of the functions alluded to there were carried out by the Conservation Division but now are carried out by MMS.

Mr. **Yates**. I see. When you use the phrase, "reduce the regulatory role of the Federal Government," it relates entirely to that activity?

Dr. **Peck**. Yes, sir.

Mr. **Pendley**. Yes, sir.

Mr. **Yates**. "Accelerate and expand domestic energy and mineral production," are you going to be able to do that with the cutback in the Bureau of Mines?

Dr. **Peck**. Partly, that is alluding to such programs as the accelerated leasing of the Outer Continental Shelf for petroleum development. Indeed, there will be a substantial increase in the number of lease sales and acreage offered.

Mr. **Yates**. That I know, but I always thought that the information the Bureau of Mines provided was helpful in that activity. I know it is being cut back significantly. Generally funding and staffing of Federal activities other than those related to national defense and certain other specified areas have been reduced.

I guess the person who wrote this must also write your Civil Service requirements. These new attitudes and policies have direct implications for both the scientific and regulatory functions of the Survey.

Fiscal year 1981 saw the initial stages of a reorientation of Survey programs and investigations to support the goals of the new Administration. Mr. Miller has testified as to those. Does somebody want to tell us about Mount St. Helens in as much as that is all over all of your documents?

MOUNT ST. HELENS

Dr. PECK. Surely.

Mount St. Helens continues to be active. It had six dome-building eruptions during the last year. About a week ago, following a number of predictions by the Geological Survey it erupted with an ash eruption for the first time in about a year. That ash eruption was accompanied by mudflows down the Toutle River.

We passed on a warning to FEMA and Forest Service who were evacuated from the summit area and evacuated from the valley of the river so there was not loss of life. We expect the activity might well go on for a number of years.

Mr. YATES. Does this mean your activities will have to be close to the area?

Dr. PECK. We have to maintain a staff for perhaps many years. We have established a center at Vancouver, staffed with about 40 scientists and technicians.

Mr. YATES. Are there adequate resources in this budget to take care of the Mount St. Helens problem?

Dr. PECK. Yes. The overall budget for volcanic hazards has been reduced this year. That cutback will be largely in monitoring other volcanic areas. We will maintain a large center at the potentially active volcanoes and cutting back our work at Mount St. Helens, but not too severely as to endanger our ability——

EARTHQUAKE PROGRAM

Mr. YATES. How about southern California?

Dr. PECK. Under the earthquake program?

Mr. YATES. Yes. I see that is cut by $2.6 million.

Dr. PECK. That is right, out of about $30 million. Most of that cutback will be taken in theoretical and laboratory studies.

Mr. YATES. Which have no value?

Dr. PECK. Indeed they have value.

Mr. YATES. Why are you cutting them back then?

Dr. PECK. Because they can be stretched out in a time of constrained budgeting. We are also going to be looking at our seismic network.

Mr. YATES. How long are you going to stretch them out? I do not think the Administration proposes to increase this budget significantly over the next few years for that activity, do they?

Dr. PECK. Probably——

Mr. YATES. I will let you think about that for a minute.

[Brief recess for vote.]

EARTHQUAKE HAZARDS IN CALIFORNIA

Mr. **Yates**. Does southern California approve of what you are doing, or don't they care?

Dr. **Peck**. I think Congressman Brown has expressed a little concern about what we are doing?

Dr. **Peck**. Right. We recently had combined House-Senate hearings on the Earthquake Hazards Reduction Act, extension of that Act. There was a little discussion about the details of our program and what we are planning to do.

Mr. **Yates**. Congressman Brown suggested perhaps the cutbacks wouldn't be helpful?

Dr. **Peck**. Well, he asked about the cutbacks. I assured him, as I assure you, that the monitoring in southern California is not going to be affected by the cutbacks. We will be taking them in other areas.

Mr. **Yates**. Your justification says, "The number of seismic stations reporting to the National Earthquake Information System will be reduced by approximately 15 percent. The schedule for the installation of geophysical instruments in southern California will be extended. Research studies on earthquake prediction methodologies to be based on these data will not be begun in fiscal year 1983. Laboratory studies of earthquake models will be reduced." Where are you taking the 15 percent from?

Dr. **Peck**. We are going to be examining the whole network and see if there are some redundancies built into it.

Mr. **Yates**. Suppose there are not?

Dr. **Peck**. Oh, I think that——

MINERALS MANAGEMENT SERVICE

Mr. **Yates**. If there is a 15 percent reduction, there are? Right? I see.

I think probably for this record we ought to cover, too, what Minerals Management Service proposes to do. The publicity that GS received as a result of its inspection and review and supervision of the collections of royalties on oil and gas wells in public lands did not do the Service credit.

Apparently you are no longer going to do it, is that right? The Minerals Management Service is going to do it.

Mr. **Pendley**. That is correct, yes.

Mr. **Yates**. What do you propose to do through the Minerals Management Service to correct the situation?

Mr. **Pendley**. Mr. Chairman, as you note——

Mr. **Yates**. This is your statement, Mr. Pendley?

Mr. **Pendley**. Yes, sir.

Mr. **Yates**. That may be made a part of the record.

[The statement of William Pendley follows:]

STATEMENT OF WILLIAM P. PENDLEY, ACTING DIRECTOR, MINERALS MANAGEMENT SERIVCE DEPARTMENT OF THE INTERIOR, BEFORE THE HOUSE SUBCOMMITTEE ON APPROPRIATIONS FOR THE DEPARTMENT OF THE INTERIOR AND RELATED AGENCIES

March 31, 1982

Mr. Chairman and Members of the Committee:

I am delighted to be with you today to discuss the Fiscal Year 1983 budget proposal for the Minerals Management Service. The proposal involves the budget activity entitled "Conservation of Lands and Minerals" which is contained within the appropriation for Surveys, Investigations and Research. The amounts provided in that budget activity are for the classification and evaluation of the mineral resources of Federal and OCS lands in support of the Department of the Interior's leasing programs and for the supervision of industry operations on Federal, Indian and Outer Continental Shelf Lands including exploration, development, and production of various energy and mineral resources. The Conservation of Lands and Minerals budget activity also provides the resources for the Department's program to collect royalties from energy and minerals production on Federal, Indian, and OCS leases.

The increasing importance of the Royalty Management Program was the principal reason for the Secretary's decision of January 19, 1982, to create the Minerals Management Service from what had previously been the Conservation Division of the Geological Survey. The action was taken in response to recommendations made by the Secretary's specially appointed Commission on Fiscal Accountability of the Nation's Energy Resources, otherwise known as the Linowes Commission. While the Linowes Commission dealt principally with the problems associated with the collection of royalties due to the Government, the creation of the Minerals Management Service also dealt with often expressed Congressional beliefs that the mission of the Conservation Division obstructed the Geological Survey's capability to conduct its scientific and technical missions. The principal reason for forming the Minerals Management Service was to ensure that proper emphasis would be placed on royalty collection, lease management, and leasing activities previously conducted by the Conservation Division. Formation of the Service had the additional salutary effect of establishing a professional corps of technical personnel devoted to activities associated with the integrated process of leasing, exploration, development, production, and revenue collection for leasable minerals on public lands.

We of the Minerals Management Service are very pleased by the Secretary's decision to elevate our organization within the Department of the Interior. This committee has long supported the Department's efforts to make additional energy and mineral resources available to the American public through the leasing of Federal, Indian, and OCS lands. The committee has also been very supportive of our efforts to implement an improved Royalty Management Program. We would like to note that we feel that the Secretary's action provides additional assurances to you and to the public that the Department intends to diligently discharge its responsibilities with regard to the management of our natural resources.

CONSERVATION OF LANDS AND MINERALS

In FY 1983, the Minerals Management Service is requesting $128.5 million, a programmatic increase of $8 million above amounts provided in FY 1982. The request does not include consideration of adjustments to the FY 1982 Royalty Management Program.

The request for FY 1983 reflects several important departures from previous budgets. While we have been working diligently to implement the improved Royalty Management Program, the Minerals Management Service has also been concerned with the streamlining and refinement of the various leasing processes to simultaneously make additional resources available for development while decreasing the costs associated with leasing. Among the important new initiatives covered in the FY 1983 request are:

--An OCS Program which offers additional acreage for leasing while also eliminating certain costly practices of the past and streamlining other efforts to be used on an "as required" rather than comprehensive basis.

--A re-emphasis of the OCS Reserve Inventory Program which had previously been deferred to meet the mounting costs of the OCS Leasing Program.

--An increased emphasis on management of oil and gas leases on Federal and Indian lands through redirection of personnel resources already available to the Minerals Management Service.

--A streamlined Coal Program which places greater emphasis on the use of information to be provided by industry.

The major program changes proposed in the FY 1983 Request for Conservation of Lands and Minerals are listed in Exhibit 1. I will briefly summarize them:

OCS LANDS

The total request for OCS Lands in FY 1983 is $66.7 million, a net programmatic increase of $2.8 million above amounts provided in FY 1982. The FY 1983 program proposal provides for an increase of $1 million to address additional regulatory workload associated with the processing of applications for permit to drill and compliance with other requirements of the OCS Lands Act Amendments of FY 1978. An additional request of $1 million is made for Area Identification and Evaluation, formerly Tract Selection and Evaluation, to support the proposed leasing schedule of July 1981 as was subsequently modified by the proposed program which is currently under public review. The request includes consideration of the major policy changes regarding the conduct of post-sale rather than presale evaluation of tracts and the decision to conduct hazards assessments of each tract post-sale based on industry supplied data. The request of $2.6 million for the OCS Reserve Inventory Program is made possible, in part, by the proposed redirection from the OCS Reservior Shut-In/Efficient Operations Program which makes $1.8 million available.

FEDERAL AND INDIAN LANDS

The total request for Federal and Indian lands in FY 1983 is $39.9 million, a net program decrease of $1.5 million below levels provided in FY 1982. The proposed increase of $1.5 million for the Onshore Oil and Gas Program is to provide funding to support additional inspection activities and to address an increasing workload in the processing of applications for permits to drill. Additional requirements associated with the Linowes Commission's findings are under consideration in the Department pending the development of a lease inspection strategy which will address the broad concerns regarding the adequacy of the Department's efforts to manage Federal and Indian oil and gas leases. The proposed decrease of $3 million to the Coal Program is made possible by the Departments shift to the post-sale evaluation process which would place greater reliance on industry-supplied drilling data to support tract evaluation and Fair Market Value determinations.

ROYALTY MANAGEMENT

The proposal for Royalty Management is for a total of $21.9 million, an increase of 6.8 million above the amounts provided in FY 1982. While the proposal contained in the FY 1983 budget emphasizes the implementation of a Production Accounting and Auditing System, we intend to propose in the near future a somewhat different mix of activities which we feel are more responsive to the concerns raised by the Linowes Commission. Specifically, we will be proposing yet further accelerations of efforts already underway to convert from the old Royalty Accounting System to the improved Audit and Financial System, while simultaneously beginning work on the implememtation in FY 1982 of the Production Auditing and Accounting System. Further emphasis will also be placed on an expanded auditing program which will be closely coordinated with a proposed Look-Back Auditing Program to be conducted by the Department's Inspector General.

RECENT DEVELOPMENTS AND FUTURE INITIATIVES

Before closing, Mr. Chairman, I would like to briefly touch on some recent developments that may be of interest to the committee, and comment on future initiatives in which I believe the Minerals Management Service will play an important role.

With regard to the Royalty Management Program, we have already begun action on each of the 60 recommendations of the Linowes Commission with the commitment to meet or exceed the goals of those recommendations. Many of the items will be dealt with in a legislative package which would govern the collection of royalties due from production of Federal, Indian, and OCS lands. Other items of an administrative nature are already well underway.

We have already committed to a greatly expanded OCS Leasing Program, which will offer far more acreage than has ever been available in the past for industry exploration, and, ultimately, development. This expansion of the leasing program was accomplished during a time when we were simultaneously streamlining our internal processes within the Department to ensure that the leasing program could be conducted more efficiently and cost effectively. Our reviews of our processes have resulted in approaches to leasing which place greater emphasis on an expanded industry role in bearing the cost of providing the information which is necessary to the decisions which protect the public interest. Equal emphasis has been placed on our procedures for review and approval of various permits which are required prior to the initiation of industry activities on leased lands. We note that the streamlining measures have been made without compromising any of the public's concerns regarding environmental protection.

As of this time, only 2.4 percent of the Nation's Outer Continental Shelf has been leased for oil and gas development. Our goal for the next 5 years is to offer the entire Outer Continental Shelf for lease. Current production from the Outer Continental Shelf contributes about 8 percent of the Nation's production of oil and about 25 percent of the Nation's production of natural gas.

I have already briefly touched upon the streamlining measures which make possible the reduction in budget authority for the Coal Program. I want to add that during this last year we have supported the first round of coal leasing that has occurred in the last 10 years.

Again, I would emphasize that the Secretary's creation of the Minerals Management Service reflects this administration's commitment to make additional natural resources available for the public while also protecting the public interest with regard to the environment and revenue collection. The formation of the Minerals Management Service has far more profound implications because of the emphasis which will now be placed on the lease management issues which are the logical follow-up of leasing programs.

Mr. Chairman, I am prepared to answer your questions.

Exhibit I

Summary of Minerals Management Service Increases and Decreases in the FY 1983 Budget Request

Conservation of Lands and Minerals

OCS Lands	+2.8 million
Regulation of Operations	(+1.0 million)
Reservoir Shut-in/Efficient Operations	(-1.8 million)
Area Identification and Evaluation	(+1.0 million)
Reserve Inventory	(+2.6 million)
Federal and Indian Lands	-1.5 million
Onshore Oil and Gas	(+1.5 million)
Coal	(-3.0 million)
Royalty Management	+6.7 million
Total	+8.0 million

WILLIAM PERRY PENDLEY

DEPUTY ASSISTANT SECRETARY OF THE INTERIOR FOR ENERGY AND MINERALS

Native of Cheyenne, Wyoming.

J.D., College of Law, University of Wyoming, Laramie, Wyoming, May, 1976.

M.A., Public Affairs, George Washington University, Washington, D.C., August, 1968.

B.A., Public Affairs, George Washington University, Washington, D.C., May, 1967.

Minority Counsel, Mines and Mining Subcommittee, Interior and Insular Affairs Committee, U.S. House of Representatives, Washington, D.C. from January, 1978 to January, 1981.

Legislative Assistant, U.S. Senator Clifford P. Hansen, United States Senate, Washington, D.C. from August, 1976 to January, 1978.

Captain, United States Marine Corps. March, 1969 to August, 1973. Naval Flight Officer.

In 1980, President-elect Reagan appointed Mr. Pendley as a member of his Strategic Minerals Task Force responsible for submitting to the President recommendations for achieving a national strategic minerals policy.

Mr. Pendley was appointed by Secretary of the Interior James G. Watt in March, 1981. He has been instrumental in formulating energy and minerals policy, and has direct oversight over Interior's U.S. Geological Survey, Office of Surface Mining, and Bureau of Mines.

Most recently Secretary Watt named Mr. Pendley as Acting Director of the Minerals Management Service. In this capacity, he oversees the reorganization and restructuring of the royalty collection functions within the Interior Department until a permanent Director is named.

Mr. **Pendley**. In speaking to the entire MMS budget, might I give a brief summarization of the $128.5 million——

Mr. **Yates**. Sure you may.

Mr. **Pendley**. Mr. Chairman, a separate witness list was provided to your staff delineating myself and the other members of the Minerals Mangement Service. They are here with me this morning.

Mr. **Yates**. All right. Now, inasmuch as you are going to testify we will put a copy of your biography into the record. Thank you.

[The information follows:]

William Perry Pendley, Deputy Assistant Secretary of the Interior for Energy and Minerals, and Acting Director, Minerals Management Service

Native of Cheyenne, Wyoming.

J.D., College of Law, University of Wyoming, Laramie, Wyoming, May, 1976.

M.A. Public Affairs, George Washington University, Washington, University, Washington, D.C., August 1968.

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Most recently Secretary Watt named Mr. Pendley as Acting Director of the Minerals Management Service. In this capacity, he oversees the reorganization and restructuring of the royalty collection functions within the Interior Department until a permanent Director is named.

Mr. **Pendley**. As you know, on the 19th of January of this year the Secretary created the Minerals Management Service by removing the entire Conservation Division out of the GS. It has three important responsibilities.

One is categorization of mineralized lands. Second is the monitoring of mineral activities upon Federal and Indian lands. Third is to collect, receive, and distribute royalties and revenues received as a result of those mineral activities.

In the budget this year, we are directing prime attention to the third phase, the royalty accounting function, with respect to inspection activities on and offshore, to assure proper site security to and prevent theft to the extent the Government can in its responsibilities.

In addition, we are placing emphasis upon development of a new system to bring the MMS into the 1980's and 1990's assuring the Government full collection of all the royalties that are owed.

Overall we are requesting a $2.8 million increase on our OCS related activities. Mr. Chairman, your question to the Director of the Survey with regard to how the USGS will assist the activities of the Secretary with regard to the OCS, most of those activities are now primarily in MMS as they had been in the Conservation Division.

We are going to increase our activities with regard to our regulatory function, out on the 6,000 or so wells on the OCS. In addition, we will increase our activities with regard to evaluation and identification of resource areas. In addition to that we will increase activities with regard to evaluation of oil and gas reserves out on the OCS so America might have a better idea of what is the potential of these OCS areas.

In the onshore area, just as the USGS is increasing its activity with regard to coal assessments, so MMS in sort of a seesaw is substantially reducing its tract-specific drilling program and asking for a cut in those responsibilities, while we ask for a $1.5 million increase in our budget to insure the inspection of these onshore oil and gas facilities of which there are some 44,000.

Finally, we are asking for increases with regard to royalty management responsibilities so we might have a system that is fully on board and able in the 1980's and 1990's to insure that number one, America knows what funds are in the owing, and number two, that America can collect those funds and insure their distribution to the Indians, to the States and to the Federal Treasury.

LINOWES COMMISSION RECOMMENDATIONS

Mr. Chairman, as you know, when we testified last week, the Secretary stated that he has received from Chairman Linowes of the Linowes Commission a full report on what needs to be done. We have taken that report in its entirety and moved to implement each of the 60 recommendations of the Commission. We have moved aggressively in that area and I might briefly summarize quickly some of the high points of what we have done recently.

We have conducted, for the first time in the MMS history a training program for our inspectors in the field. We have half our inspectors now undergoing a 7-week training program in Denver to insure that they know what our rules and regulations are so we can have uniform national application of these standards to insure proper production of oil and gas on Federal and Indian lands.

Mr. YATES. Will you have enough inspectors on board?

Mr. PENDLEY. We are looking at that very closely, Mr. Chairman, because we have been asked to develop a national enforcement strategy. Unfortunately, in the past, the Government has not had a national strategy.

What we are trying to do is put together such a strategy and determine, after we receive that, and prioritize the elements of that strategy, how many people we need to accomplish those objectives.

Now, I will say that we think there are creative ways we can go about doing this function. One of the things we need to do is be tougher in the field and supervise supervisors and make sure supervisors and inspectors are aware. I spoke to the training program people assuring them of the full support and backing of the Washington-level management to their aggressive activities out on the Federal lands to insure proper inspection and enforcement.

In addition, the Secretary delivered to the Speaker and to the Vice President last week a legislative proposal to place for the first time, civil and criminal penalties upon failure to report, consistent underreporting and violations of site security standards. It was the first time that request has ever been made, and we think that is an aggressive program that will insure the proper enforcement of our activities on and offshore.

Mr. Chairman, there are a number of other activities that were briefly summarized when we were here last week. I will be glad to go into them in detail as you might desire. Otherwise, I would conclude at this point by saying that we have the full support of the Secretary with regard to this aggressive program. We are proud of it. We think that it is a program of which the American people can be proud as well.

Thank you, Mr. Chairman.

INDIAN LEASES

Mr. YATES. Part of this is on Indian lands. How much of your program is on Indian lands?

Mr. PENDLEY. Mr. Chairman, the Indian country can lease their lands under the Indian Leasing Act of 1939 and those leases are given by the tribes. But, the inspection and enforcement of those activities are a responsibility of the Minerals Management Service. Except for one tribe in Oklahoma, the Osage, the Minerals Management Service is responsible for inspection and enforcement on——

Mr. YATES. Is that by agreement with the Indians?

Mr. PENDLEY. Mr. Chairman, that is part of the Secretary's trust responsibilities with regard to the Indian Nation.

Mr. YATES. The question is whether or not the Indian Nation want that responsibility to be continued through the Secretary.

Mr. PENDLEY. Mr. Chairman, it is my understanding from the sessions we have had that they seek to have the MMS continue those functions and to continue to be aggressive in our activities. In fact, just last week, MMS representatives met in New Mexico with a large number of Indian tribes to talk about our activities out on the public land, on the Indian land and received their full support for a continued aggressive program.

The Linowes Commission, as you know, Mr. Chairman, has recommended that the Indian tribes enter into cooperative agreements with the Federal Government to assist the Federal Government in these activities. We are aggressively pursuing that avenue in talking to the tribes.

Dr. Miller and Ken Smith have written to all 24 Indian tribes who have oil and gas production on their reservations asking that they join with the Federal Government in a cooperative undertaking to insure enforcement of these responsibilities. There are about 3,000 producible leases on Indian land over which we have——

Mr. YATES. Producible or producing?

Mr. PENDLEY. Producible.

Mr. YATES. How many are producing?

Mr. PENDLEY. Over 2,000.

Mr. YATES. That is quite an inspection task you have.

Mr. PENDLEY. Yes, it is, Mr. Chairman.

Mr. YATES. All right.

CIVIL AND CRIMINAL PENALTIES

Mr. **Pendley**. One of the things we have lacked in the past, as the Linowes Commission points out, is the ability to enforce these with civil and criminal penalties.

As you know, nothing gets an individual's attention like sharp fines for violations. That has been lacking in the past. The only sanctions we have had are liquidated damages which are very minor, almost infinitesimal, or shut-in or cancellation of the lease.

Well, that is a tremendous jump. What we need is a gradation of civil penalties. We have asked for a civil penalty of up to $10,000 a day and a criminal penalty of up to $25,000 a day that we might assess to get the attention of these oil and gas operators out there so that they might persevere in getting the word down to their folks what they expect of them and what the government expects as well.

Mr. **Yates**. Does that require legislation?

Mr. **Pendley**. Yes, Mr. Chairman. On March 25th the Secretary sent legislation to the Hill. The Mines and Mining Subcommittee chaired by Congressman Santini held hearings on the subject.

In fact, last Thursday, they marked up the legislation and reported it to the full committee. We expect that—if it has not happened yet, it will happen this week—that the Senate will introduce the legislation. Mr. Chairman, let me add one point.

Mr. **Yates**. Go ahead.

Mr. **Pendley**. Several weeks ago the Secretary took a rather unprecedented action. He signed a letter to every lessee and operator on Federal and Indian lands informing them that we hold them primarily responsible for site security and that we will enforce our rules and regulations accordingly.

This is an unprecedented action, but we think it is a serious problem and it deserves that type of unprecedented behavior on the part of the Secretary.

Mr. **Yates**. What has been the response to the letter?

Mr. **Pendley**. An increased acute awareness of what we are going to demand. Last week I was in Denver at an oil and gas session that the Federal Government was conducting with the private sector. We had about 400 people there who came in to talk. I think nearly every other question was, "What is going on out there? What are you seeking?"

Of course, the word we put out was that we were going to be tough, enforce the law. "You folks are going to have to go out there and start cleaning up your activities."

Mr. **Yates**. Do the Indian people expect you to try to collect the money that has been lost through inadequate supervision over the leasing?

Mr. **Pendley**. Yes, Mr. Chairman, I believe they do, and I believe rightly so. We have had, frankly, a miserable system in the past. The Government has had a miserable system. Not through any fault of the Congress, because the Congress has delivered everything that has ever been requested as far as the budget is concerned. The requests have come up and they have been fulfilled.

What has failed in the past is the willingness to take hold of this situation. What we are doing to remedy that, as testified last week, is our Inspector General at the Department of the Interior has initiated a very aggressive lookback audit procedure where he will conduct lookback audits on the 25 largest gas and oil companies which account for about 82 to 85 percent of the royalties we receive.

Now, caught up in that, Mr. Chairman, will be leases upon Indian lands. In addition, we are conducting a lease-by-lease investigation upon the Indian River for the Shoshone and Arapaho in Wyoming. After expenditures of about $88,000, we collected about $3.1 million. We think that is a pretty good return for the effort.

LEGAL REPRESENTATION FOR INDIAN LESSEES

Mr. **Yates**. Does the Department of the Interior have the power to file suit on behalf of the Indian people, or are you required to go to the Department of Justice?

Mr. **Pendley**. Mr. Chairman, we are required to go to the Department of Justice with that.

Mr. **Yates**. Wouldn't it be better just to let you file suit directly? Shouldn't Mr. Santini's legislation give you that authority?

Mr. **Pendley**. Mr. Chairman, the Administration has requested that the Attorney General continue to have his traditionally mandated responsibilities to file on behalf of the Federal Government. We have no objections to that. We think that is the proper way to go. With the national attention that has been focused on the issue and with the millions of dollars we are speaking of, we think the Attorney General will be fully supportive of our efforts to recover these royalties.

Mr. **Yates**. You are in a delicate situation; I am speculating, but I would guess that if the Indian tribes haven't received the royalties to which they were entitled, they may have a claim against the Federal Government.

If they have such a claim, then the Department of Justice would be required to defend against that claim, and at the same time, they would be called upon to defend on behalf of the Indian people. That is why I wonder whether or not there ought to be a separate legal authority of some kind in the Department of the Interior perhaps.

You would be up against the same kind of a confrontation in the Department of the Interior, as well. In the past, the committee has provided funds to the Indian nations to hire their own lawyers if they preferred to do that, rather than go to the Department of Justice.

I guess in this intance they could do the same thing. In that case, you or BIA would have to come before the committee and say, "This Indian tribe needs money to prosecute a claim against the Government of the United States."

I guess it would be BIA, wouldn't it?

Mr. **Pendley**. Yes, Mr. Chairman.

Mr. **Yates**. Staff reminds me that at the hearing last week it was pointed out that the Department of the Interior had recommended against protecting, or representing the Indian people in connection with their water rights, and the Department of Justice overruled the Department of the Interior and said, "No, we have to protect the Indian people in this instance."

Mr. **Pendley**. I have no knowledge of that, Mr. Chairman.

Mr. **Yates**. Of course you don't. It depends on attitudes.

COOPERATION WITH STATES

Mr. **Pendley**. Mr. Chairman, if I might add, we have a slightly, not completely, but slightly analogous situation with regard to the State of California.

Last year, the State of California filed suit against the Federal Government on just that sort of claim. That there were monies owing, the Federal Government had failed to be forthcoming on the monies, and they wanted their payment. They were joined in that lawsuit by a number of other western oil and gas producing States. It was our belief that the best way for the State of California to go was to join with us in a cooperative audit as we have in the State of Wyoming, New Mexico and North Dakota and seek to find those royalties.

We were successful in convincing the State of California that that was the way to go. They agreed to pull down their suit until the completion of our cooperative audit exercise. What we think we will be doing, rather than be adversaries with the Indian people, is that we will be engaged with them in ferreting out these unpaid royalties, and in fact we will discover the royalties and we will come to an agreement about the amount in the owing, and we will seek, together, to have payment from the companies who have underpaid.

Mr. **Yates**. Well, that is kind of an interesting procedure. How do the Indian people know that they are being protected in this instance? You will have negotiated a settlement, usually, with the oil companies on behalf of the Government of the United States for itself and as trustee with the Indian people.

Should you be required to hire an independent accounting firm or engineering firm to make sure that your settlements are equitable?

Mr. **Pendley**. Mr. Chairman, we are doing precisely that.

Mr. **Yates**. Are you?

Mr. **Pendley**. Yes, sir.

Mr. **Yates**. Tell us for the record what you are doing.

Mr. **Pendley**. We are doing precisely that, because the so-called lookback audits that are being performed—all audits are lookbacks but we are calling them a "lookback audit,"—all 25 lookback audits that our Inspector General is conducting are being conducted with the assistance of private CPA firms that the IG, himself, is contracting with.

He is entering into those contracts. That is an independent assessment that is being made by a private CPA firm. Then they are reporting to us about the monies in the owing.

Mr. **Yates**. Okay.

WIND RIVER ALLOTTEES

Then why do we find newspaper articles like the one that appeared on Friday, February 12, 1982, in the Caspar, Wyoming, Star-Tribune, which has the headline, "Indian Waiting For Investigation Funds."

This article comes out of Ft. Washekie. A group of Indians here still has not received funds from the Interior Department to investigate alleged royalty accounting errors, although it asked the government for the money almost a year ago.

"An attorney for the group, Wind River Allottees association, says federal officials are 'dragging their feet' but an Interior spokesman says the department cannot find any legal way to fund the request. About 350 Arapaho and Shoshone Indians belong to the association formed in 1981. Last spring, they asked for $25,000 to $35,000 to investigate an oil companies claims that overpaid them underpaid the tribal Government.

"Allottees are individual tribal members who hold interest in mineral leases under a special trust arrangement with the Government. These lease interests do not belong to the tribes, nor are they private interests. Thus, the allottees depend on the Interior Department to be sure oil and natural gas producers pay the correct amount of royalties." Then it goes on to say that, "In April 1981, Amoco Production Co. announced it had found accounting errors in the reservation's Lander Field. Amoco said it had underpaid the tribe, because the company had incorrectly credited royalties due the Shoshone and Arapaho governments to the allottees.

"The allottees however, said they were not sure of Amoco's explanation, and wanted to investigate the payments themselves." Sounds reasonable. "An independent probe was needed, they said because tribal investigators were only concerned with payments to the reservations government's.

"The allottees asked Interior for funds because association president Billy O'Neal said at the time, department officials were 'the ones who got us into this mess to begin with.'"

REQUEST TO CANCEL LEASES

Sounds reasonable again. "In November 1981, tribal investigators asked Interior to cancel leases held by Amoco and Standard Oil of Ohio." What happened to that?

Mr. PENDLEY. Mr. Chairman, that request was processed. Minerals Management Service received appeals on behalf of the Indian tribes. We received a packet of appeals on behalf of Amoco. We have reviewed both documents. We found that the allegations made by the tribes were correct, and we forwarded the package to the Assistant Secretary for Indian Affairs who has the final decision with regard to the cancellation of those leases.

Mr. YATES. Isn't the final decision the Secretary's?

Mr. PENDLEY. It is the Assistant Secretary for Indian Affairs.

Mr. YATES. It is really the Secretary's?

Mr. PENDLEY. The Secretary's authority is delegated to the Assistant Secretary who has authority to cancel a lease on the request of an Indian tribe.

Mr. YATES. The request is now pending before him?

Mr. PENDLEY. Yes, Mr. Chairman.

Mr. YATES. How long has it been pending?

Mr. PENDLEY. I think that we delivered the package last week, Mr. Chairman. But, no, I am not precisely sure.

Mr. YATES. What about the question of funding the investigation on behalf of the Indians? It says that "The Department cannot find any legal way to fund the request." Is that an incorrect statement? It is an Interior spokesman who said that. "The Department can't find any legal way to fund the request."

Mr. PENDLEY. Mr. Chairman, I do not know of the request. It has not been brought to my attention. The request may have been made before the Assistant Secretary for Indian Affairs and before their energy and minerals office. That may be where the request is now. But I know of no such request.

Mr. YATES. Does anybody know of the request? Mr. Gorrell, do you know of the request?

Mr. GORRELL. No, sir, I do not.

Mr. YATES. To whom should that request be made? Should it be made to BIA, or should it be made to you?

Mr. PENDLEY. Well, the Assistant Secretary for Indian Affairs in their energy and minerals office does have some lease monitoring responsibilities. In addition, we have some responsibilities. I guess the request could be made to either office.

Mr. YATES. Which office has the responsibility of resolving such a request?

Mr. PENDLEY. Well, Mr. Chairman, I really can't speak to that. I don't have enough knowledge of the separate——

Mr. YATES. But if you have two offices, aren't you in trouble? I had the impression that you were in charge. Now, what you are telling me now is that there is another office that has some responsibilities in this respect.

Mr. PENDLEY. Mr. Chairman, with regard to Indian land, that is correct.

Mr. YATES. Then aren't we in trouble? Here you have split, then. You don't know anything about the request. Presumably it was made to the other office, then.

Mr. PENDLEY. Presumably, yes, sir.

Mr. YATES. Well, should we bring them in here now? Should we bring them in this afternoon, find out what happened? What do you think?

Mr. PENDLEY. Mr. Chairman, I can find the answer for you.

Mr. YATES. Why don't you bring your partner in this afternoon. Let's see what he says about this, because you would only be repeating what he told you, wouldn't you?

Mr. PENDLEY. Probably, Mr. Chairman.

Mr. YATES. Let's hear it from him. It has been going on since last spring they said. So, let's find out about this divided responsibility and what happens in the future to Indian people who make requests. Someone may come to you with a request and you may act upon it, and your partner may not know about it. So, bring him in and let's see where the responsibility begins and ends.

Mr. PENDLEY. Fine, Mr. Chairman.

Mr. YATES. I think we ought to have some kind of a coordination here. Apparently it does not exist.

Mr. PENDLEY. Yes, sir. We have such coordination.

Mr. YATES. But it broke down here.

Mr. **Pendley**. On the specific request, you are right, Mr. Chairman.

Mr. **Yates**. That is right, it broke down on this request.

Mr. **Pendley**. One of the recommendations of the Linowes Commission was that we engage in what appears to be the request of the Wind River Tribe, which was an exercise in cooperative audits and inspection activities with various Indian tribes. That is one of the authorities that we seek. Under our proposed legislation, we would be specifically given that authority. We are now in the process of discussing such activities with the tribes. What happened to this $25,000 to $30,000, I don't have the answer. But we will provide it for you.

OTHER TRIBES HAVE PROBLEMS

Mr. **Yates**. There is much more involved in this, of course, than the $25,000 or $30,000. You talked about 2,000 producing leases out of 3,000 producible leases.

How many tribes are involved?

Mr. **Pendley**. I think that we have about 24 tribes that have producing oil and gas wells.

Mr. **Yates**. With existing leases?

Mr. **Pendley**. Yes, Mr. Chairman.

Mr. **Yates**. The Wind River groups, Shoshone and Arapaho, are the only ones who have asked to terminate the leases?

Mr. **Pendley**. Well, I do not know precisely of other tribal requests on the subject. This is the first request that I have received since I took over as Acting Director of Minerals Management Service.

The Indian Nation has been aggressive with regard to the inspection and enforcement activities on their property. We have participated in that activity with them.

Mr. **Yates**. Well, here is another newspaper article from the Billings Gazette, December 5, 1981, "Energy companies reacted with surprise and denial Friday to a published report that an investigator has found irregularities in oil accounts on the Blackfeet Indian Reservation.

"Meanwhile, tribal officials confirmed to the investigator that his firing would be effective Dec. 20.

"Former USGS employee Charles Thomas was advised Friday by the Tribal Council officials he was fired 'because we're not getting any return on the money, $36,000 annual salary Thomas receives.' "

I don't understand that. Did the tribe pay Mr. Thomas' salary?

Mr. **Pendley**. It sounds like he was a private investigator for them after he left USGS. He is not a USGS employee or an MMS employee.

Mr. **Yates**. It says, "When Thomas worked for the USGS, he generally was credited with opening up the investigation into unpaid royalties, lax security and alleged thefts of oil on Federal and Indian lands throughout the West. He later worked as an investigator for the Arapahoes and Shoshones on the Wind River Reservation. . . ." Looks like he made this a career. ". . . before going to work for the Blackfeet in June."

"Caspar Star-Tribune reported that Thomas told the Blackfeet Business Council Thursday he had uncovered similar irregularities on the Blackfeet reservation, and he recommended cancellation of 26 of the 28 leases he had examined.

"Thomas also said he expected irregularities would be found on half of the 300 leases on the 1.5 million-acre reservation just east of Glacier National Park were companies produced 8,000 barrels of oil a day from 544 wells, plus quantities of natural gas.

"Thomas said the 26 leases were held by Montana Power Company which has regional offices in Denver. . . ."

Senator Melcher investigated and described oil monitoring by USGS as, "loose as a goose." I guess that is true, isn't it? It would be interesting to know how many Indian tribes are concerned about this. As of now, you just know about the Wind River tribes?

Mr. PENDLEY. Well, I think they all are. I know the Jicarillas had a meeting with MMS in New Mexico last week on the subject. We have encouraged that concern. As I indicated, Dr. Miller and Assistant Secretary Ken Smith wrote a joint letter to all the Indian tribes advising them of our concern on the issue and asking them to come forward in any kind of exercise in which they would like to engage.

Mr. YATES. Would you place in the record a list of the tribes who have the 2,000 leases and how many leases each has?

Mr. PENDLEY. Yes, Mr. Chairman.

[The information follows:]

PRODUCING OIL AND GAS LEASES ON INDIAN LANDS SUPERVISED BY THE MINERALS MANAGEMENT SERVICE

Tribe or reservation	Tribal leases	Allottee leases
Apache		16
Arapaho		2
Blackfeet	135	35
Caddo		166
Cherokee		27
Cheyenne		6
Cheyenne and Arapaho	30	411
Cheyenne River		3
Chickasaw		42
Chickasaw-Choctaw	25	
Chippewa		1
Choctaw	7	26
Comanche		62
Creek	1	313
Creek-Chickasaw-Choctaw	26	
Crow	7	6
Fort Belknap		6
Fort Berthold		18
Fort Peck	5	49
Iowa		2
Jicarilla Apache	131	
Kiowa		45
Navajo	170	232
Otoe		29
Pawnee	2	59
Ponca	2	48
Pottawatomie		12
Rocky Boy's	12	
Sac and Fox	1	44

PRODUCING OIL AND GAS LEASES ON INDIAN LANDS SUPERVISED BY THE MINERALS MANAGEMENT SERVICE—Continued

Tribe or reservation	Tribal leases	Allottee leases
Seminole	1	89
Shawnee		16
Southern Ute	62	8
Turtle Mountain		1
Uintah and Ouray	133	21
Ute Mountain	41	
Wichita	1	47
Wind River	92	6
Total	884	1,848

MINERALS MANAGEMENT SERVICES SUPERVISED OIL AND GAS OPERATIONS ON INDIAN LANDS APRIL 1982—SUMMARY TABLE

State	Total leases	Producing		
		Leases	Oil wells	Gas wells
Arizona:				
Tribal	55	11	45	6
Allotted	0	0	0	0
Total	55	11	45	6
Colorado:				
Tribal	249	73	24	471
Allotted	25	8	0	16
Total	274	81	24	487
Florida:				
Tribal	377	0	0	0
Allotted	0	0	0	0
Total	377	0	0	0
Michigan:				
Tribal	0	0	0	0
Allotted	1	1	1	0
Total	1	1	1	0
Mississippi:				
Tribal	23	0	0	0
Allotted	0	0	0	0
Total	23	0	0	0
Montana:				
Tribal	384	159	339	49
Allotted	1,058	96	118	16
Total	1,442	255	457	65
New Mexico:				
Tribal	547	224	713	1,127
Allotted	789	231	80	230
Total	1,336	455	793	1,357
North Dakota:				
Tribal	141	0	0	0
Allotted	2,085	19	19	0
Total	2,226	19	19	0

MINERALS MANAGEMENT SERVICES SUPERVISED OIL AND GAS OPERATIONS ON INDIAN LANDS APRIL 1982—SUMMARY TABLE—Continued

State	Total leases	Producing		
		Leases	Oil wells	Gas wells
Oklahoma:				
Tribal	247	96	113	15
Allotted	5,300	1,462	1,891	244
Total	5,547	1,558	2,004	259
South Dakota:				
Tribal	4	0	0	0
Allotted	96	3	3	0
Total	100	3	3	0
Utah:				
Tribal	1,474	229	718	13
Allotted	213	22	15	8
Total	1,687	251	733	21
Wyoming:				
Tribal	830	92	444	105
Allotted	182	6	50	2
Total	1,012	98	494	107
All States:				
Tribal	4,331	884	2,396	1,786
Allotted	9,749	1,848	2,177	516
Total	14,080	2,732	4,573	2,302

MINERALS MANAGEMENT SERVICE SUPERVISED OIL AND GAS OPERATIONS ON INDIAN LANDS APRIL 1982

State	Tribal	Allotted
Arizona:		
Navajo:		
Total leases	55	0
Producing leases	11	0
Producing oil wells	45	0
Producing gas wells	6	0
Colorado:		
Southern Ute:		
Total leases	212	22
Producing leases	62	8
Producing oil wells	3	0
Producing gas wells	465	16
Ute Mountain:		
Total leases	37	3
Producing leases	11	0
Producing oil wells	21	0
Producing gas wells	6	0
Florida:		
Seminole:		
Total leases	25	0
Producing leases	0	0
Producing oil wells	0	0
Producing gas wells	0	0
Micoesukee:		
Total leases	336	0
Producing leases	0	0
Producing oil wells	0	0

State	Tribal	Allotted
Producing gas wells	0	0
Brighten:		
Total leases	16	0
Producing leases	0	0
Producing oil wells	0	0
Producing gas wells	0	0
Mississippi:		
Choctaw:		
Total leases	23	0
Producing leases	0	0
Producing oil wells	0	0
Producing gas wells	0	0
Michigan:		
Chippewa:		
Total leases	0	1
Producing leases	0	1
Producing oil wells	0	1
Producing gas wells	0	0
Montana:		
Fort Peck:		
Total leases	9	117
Producing leases	5	46
Producing oil wells	5	46
Producing gas wells	0	1
Turtle Mountain Fort Peck:		
Total leases	0	7
Producing leases	0	3
Producing oil wells	0	4
Producing gas wells	0	5
Rocky Boys:		
Total leases	70	0
Producing leases	12	0
Producing oil wells	0	0
Producing gas wells	14	0
Fort Belknap:		
Total leases	6	196
Producing leases	0	0
Producing oil wells	0	0
Producing gas wells	0	0
Black Feet:		
Total leases	276	644
Producing leases	135	35
Producing oil wells	327	53
Producing gas wells	35	0
Crow:		
Total leases	23	20
Producing leases	7	6
Producing oil wells	7	15
Producing gas wells	0	4
Turtle Mountain Fort Belknap:		
Total leases	0	74
Producing leases	0	6
Producing oil wells	0	0
Producing gas wells	0	6
New Mexico:		
Jic. Apache:		
Total leases	233	0
Producing leases	131	0
Producing oil wells	302	0

State	Tribal	Allotted
Producing gas wells	1,015	0
Navajo:		
Total leases	153	789
Producing leases	63	231
Producing oil wells	334	80
Producing gas wells	58	230
Southern Pueblos:		
Total leases	112	0
Producing leases	0	0
Producing oil wells	0	0
Producing gas wells	0	0
Ute Mountain:		
Total leases	49	0
Producing leases	30	0
Producing oil wells	77	0
Producing gas wells	54	0
North Dakota:		
Fort Berthold:		
Total leases	104	1,981
Producing leases	0	18
Producing oil wells	0	18
Producing gas wells	0	0
Turtle Mountain Fort Peck:		
Total leases	37	103
Producing leases	0	1
Producing oil wells	0	1
Producing gas wells	0	0
Standing Rock:		
Total leases	0	1
Producing leases	0	0
Producing oil wells	0	0
Producing gas wells	0	0
Oklahoma:		
Cherokee:		
Total leases	3	36
Producing leases	0	27
Producing oil wells	0	37
Producing gas wells	0	1
Chickasaw:		
Total leases	3	92
Producing leases	0	42
Producing oil wells	0	59
Producing gas wells	0	2
Creek:		
Total leases	6	487
Producing leases	1	313
Producing oil wells	3	464
Producing gas wells	0	3
Choctaw:		
Total leases	22	226
Producing leases	7	26
Producing oil wells	11	37
Producing gas wells	0	1
Seminole:		
Total leases	1	117
Producing leases	1	89
Producing oil wells	2	131
Producing gas wells	0	2
Apache:		
Total leases	0	215
Producing leases	0	16
Producing oil wells	0	22
Producing gas wells	0	2
Caddo:		
Total leases	0	434

State	Tribal	Allotted
Producing leases	0	166
Producing oil wells	0	247
Producing gas wells	0	50
Comanche:		
Total leases	1	474
Producing leases	0	62
Producing oil wells	0	67
Producing gas wells	0	18
Otoe:		
Total leases	9	156
Producing leases	0	29
Producing oil wells	0	38
Producing gas wells	0	3
Pawnee:		
Total leases	3	223
Producing leases	2	59
Producing oil wells	3	79
Producing gas wells	0	4
Ponca:		
Total leases	3	120
Producing leases	2	48
Producing oil wells	4	65
Producing gas wells	0	3
Arapaho:		
Total leases	0	3
Producing leases	0	2
Producing oil wells	0	0
Producing gas wells	0	2
Cheyenne:		
Total leases	0	15
Producing leases	0	6
Producing oil wells	0	0
Producing gas wells	0	6
Sac and Fox:		
Total leases	1	213
Producing leases	1	44
Producing oil wells	2	61
Producing gas wells	0	2
Shawnee:		
Total leases	0	258
Producing leases	0	16
Producing oil wells	0	20
Producing gas wells	0	2
Kickapoo:		
Total leases	0	115
Producing leases	0	0
Producing oil wells	0	0
Producing gas wells	0	0
Kiowa:		
Total leases	0	757
Producing leases	0	45
Producing oil wells	0	56
Producing gas wells	0	13
Iowa:		
Total leases	0	27
Producing leases	0	2
Producing oil wells	0	4
Producing gas wells	0	0

State	Tribal	Allotted
Cheyenne and Arapaho:		
Total leases	59	1,021
Producing leases	30	411
Producing oil wells	26	423
Producing gas wells	11	128
Pottawatonie:		
Total leases	0	33
Producing leases	0	12
Producing oil wells	0	16
Producing gas wells	0	1
Creek-Chickasaw-Choctaw:		
Total leases	45	0
Producing leases	26	0
Producing oil wells	30	0
Producing gas wells	2	0
Chickasaw-Choctaw:		
Total leases	43	0
Producing leases	25	0
Producing oil wells	29	0
Producing gas wells	2	0
Kiowa-Comanche-Apache:		
Total leases	29	0
Producing leases	0	0
Producing oil wells	0	0
Producing gas wells	0	0
Wichita and affiliated:		
Total leases	19	0
Producing leases	1	0
Producing oil wells	3	0
Producing gas wells	0	0
Witchita:		
Total leases	0	278
Producing leases	0	47
Producing oil wells	0	62
Producing gas wells	0	1
South Dakota:		
Cheyenne River:		
Total leases	0	92
Producing leases	0	3
Producing oil wells	0	3
Producing gas wells	0	0
Pine Ridge:		
Total leases	3	4
Producing leases	0	0
Producing oil wells	0	0
Producing gas wells	0	0
Standing Rock:		
Total leases	1	0
Producing leases	0	0
Producing oil wells	0	0
Producing gas wells	0	0
Utah:		
Navajo:		
Total leases	134	1
Producing leases	96	1
Producing oil wells	573	2
Producing gas wells	3	0
Uintah and Ouray:		
Total leases	1,340	212
Producing leases	133	21
Producing oil wells	145	13

State	Tribal	Allotted
Producing gas wells	10	8
Wyoming:		
Wind River:		
Total leases	830	182
Producing leases	92	6
Producing oil wells	444	50
Producing gas wells	105	2

Mr. YATES. Is your auditing going to the producing wells in each of those reservations? How extensive is it?

Mr. PENDLEY. Well, Mr. Chairman, the lookback audit is being undertaken by the Inspector General.

Mr. YATES. Yes.

Mr. PENDLEY. As I understand their program, they contract with private CPA firms. They determine what is a sample of a sufficient size to give them the type of evidence that they desire. They run the sample, and then based on what their findings are after they run the sample, they go back in.

Now, I have just exhausted my knowledge as a lawyer of this auditing procedure that is engaged in by the CPA firms. But that is what our IG has told me that they are doing.

Mr. YATES. I would suggest you may want to take a look at the investigative report by the Senate Select Committee on Indian Affairs, if you haven't looked at it already. They have taken testimony from 13 Indian tribes on the question of royalty payments—from the Jicarillas, the Fox, the Cheyenne, Arapaho and——

Mr. PENDLEY. There is no doubt about it, Mr. Chairman, it was a terrible system. They simply didn't know what money was coming in or where it was coming from.

Mr. YATES. Why did the GS do that? Does somebody from GS want to tell us?

Dr. PECK. I think we have been in the process over the last few years of improving the system, what is going on now——

Mr. YATES. Apparently, the improved system was terrible judging by what the inspectors said. You had no knowledge as to what was going on, did you?

Dr. PECK. I think that is a bit of an overstatement.

Mr. YATES. Is that unfair?

Dr. PECK. Yes.

Mr. YATES. Would you tell the committee what you think is a correct statement?

Dr. PECK. A correct statement is there were gaps in the knowledge.

Mr. YATES. Is that a correct statement, or an understatement? There were some gaps in your knowledge?

Dr. PECK. Yes. You knew almost everything that was going on. For example, we weren't sure of the identification of every payor on a lease, for example.

Mr. YATES. I really don't think that is important. Every payor on a lease. You mean every lessee? I know, you talked about the fractionalized ownership.

Mr. PENDLEY. Yes, sir.

ROYALTY PAYMENT RESPONSIBILITIES

Mr. YATES. But the payments were the direct responsibility of your lessees. The fractionalized owners were not lessees as I understand it. They were recipients of an agreement with the lessees.

Mr. PENDLEY. Yes, sir, Mr. Chairman, but they have paying responsibilities. As they receive an interest in the lease and its returns, so they have a revenue royalty responsibility to the Federal Government. It is a responsibility that the original lessee no longer holds, but as each part of it is passed on down the chain, they assume part of the responsibility.

Mr. YATES. Is that true? You have an original lessee?

Mr. PENDLEY. Yes, sir.

Mr. YATES. You did not make leases with the 650,000 fractionalized owners, did you?

Mr. PENDLEY. No, sir.

Mr. YATES. You made how many leases?

Mr. PENDLEY. Well, we have 44,000——

Mr. YATES. 44,000 leases.

Mr. PENDLEY. I am sorry, we have 17,000 leases onshore, 2,000 leases offshore, 19,000 leases total.

Mr. YATES. All right. Then those lessees then had the primary responsibility for paying the royalties?

Mr. PENDLEY. As long as they held 100 percent of the interest.

Mr. YATES. All right. Their assignments, lessees assignments of any of their leases had to be approved by the Department of the Interior, correct?

Mr. PENDLEY. Yes, sir.

Mr. YATES. So, you did know who they were as a result of knowing of the assignments and approving them?

Mr. PENDLEY. In theory, that is correct, Mr. Chairman.

Mr. YATES. Isn't it a fact?

Mr. PENDLEY. It did not happen. BLM did not always know. Sometimes when BLM knew, MMS, or the Conservation Division, the royalty accounting segment did not know. The records really weren't kept. There was not a knowledge about who had what interest and what he was to pay on the first of every month.

Mr. YATES. Is all that corrected now?

Mr. PENDLEY. It is on the way to being corrected, Mr. Chairman.

Mr. YATES. How long will it take to correct it?

Mr. PENDLEY. We are taking the steps to move to complete correction in early 1984. We have the capability, though, to know by next year, mid next year, when we finally convert our last office, which will be Casper, to know late payments, and to know nonpayments.

We will know all the payors. We will know those payors who represent that 650,000 paying interests. We will know when they have not sent in their check. We can go after them and begin assessing late payment penalties on a day-to-day basis and include interest charges, as well.

Mr. YATES. Is my memory correct? Did you not testify that something like 85 percent of the producing was done by 20 companies?

Mr. PENDLEY. Twenty-five.

Mr. **Yates**. Eighty-five percent of all the oil produced under leases is by 25 companies?

Mr. **Pendley**. That is correct, Mr. Chairman.

Mr. **Yates**. So doesn't that mean, then, that 85 percent of your royalties have to be paid by 25 companies?

Mr. **Pendley**. That is correct.

Mr. **Yates**. So, the problem then is represented by 15 percent of the oil?

Mr. **Pendley**. No, sir.

Mr. **Yates**. Not true?

Mr. **Pendley**. Not necessarily true.

Mr. **Yates**. Why isn't that true?

UNDERVALUATION OF NATURAL GAS

Mr. **Pendley**. Well, it is represented by all, because one of the problems we have seen in the past is undervaluations for example. The Linowes Commission points out that one of the biggest discrepancies relate to price of gas.

Mr. **Yates**. Tell us about the Linowes Commission.

Mr. **Pendley**. The Linowes Commission says 75 percent of our royalties come from natural gas; 56 percent at present and by 1997, 73 percent. One of the biggest problems they have found in investigations relates to undervaluation of natural gas. One of the reasons for that is we have these old contracts in the Gulf, contracts made back in the 1960's for 21 cents per MCF. Now, what is it, $2, $3, $4 per MCF? What these companies are paying us is based on 21 cents per.

On the one-sixth they pay the American Government and American people they are paying on 21 cents. In all fairness, they are just getting 21 cents per MCF on the other seven-eighths, but at the same time, the question arises: Is that the value for royalty purposes? Our IG and solicitor advises us, no, the Federal Government should be getting value.

Mr. **Yates**. Why should the Federal Government be getting value? What is the royalty payment based on?

Mr. **Pendley**. The royalty is one-eighth of the value of what is produced or one-sixth of the value of what is produced. The question is: What is the value?

Mr. **Yates**. Well, then the oil company should be stuck if that is the contract. Because the fact that they have a contract with somebody to whom they sell gas for six cents per MCF or a dollar per MCF does not bind the Government in its relationship if indeed they pay a royalty on the value. Is my interpretation correct? Isn't that what your lawyers are saying?

ROYALTY BASED ON FAIR MARKET VALUE

Mr. **Pendley**. The lawyers are saying that the value of the gas and product must be valued at fair market value at the present time. Not this old contract that was signed in 1964 without the escalating clause, but the value of the gas today or the value of the oil today.

The Federal Government has the ability to go out and take that gas or take that oil, take it in kind and turn around and sell it at fair market value. Not at 21 cents per MCF.

Mr. **Yates**. I know. Exactly. Why doesn't the Government do that?

Mr. **Pendley**. One of the problems in the past is they have not. There has been lack of attention to that issue, to product valuation.

Mr. **Yates**. Maybe one of the problems is the Government does not want to do it, because the companies have binding contracts to sell to their customers at prices far below market value. Nevertheless, the Federal Government is entitled to full value according to your contracts or it ought to be taking it in kind.

Mr. **Pendley**. That is correct, Mr. Chairman. That is what we are doing at this time.

Mr. **Yates**. Are you?

Mr. **Pendley**. Yes, sir, we are going after them. Yes, sir.

Mr. **Yates**. That is kind of interesting, isn't it?

Mr. **Pendley**. Yes, sir. It was a Secretarial decision.

Mr. **Yates**. Oh, my. Those oil companies are going to be in the same position as the savings and loan companies, aren't they, they are going to be squeezed, if indeed you do that.

Mr. **Pendley**. I do not think so, Mr. Chairman.

Mr. **Yates**. You don't think what?

Mr. **Pendley**. That they will be squeezed. They have a responsibility to pay the Federal Government——

Mr. **Yates**. I agree with that.

Mr. **Pendley**. Yes, sir.

Mr. **Yates**. But they are squeezed because presumably all they can get for the sale of that gas to their customers is a lesser amount.

Mr. **Pendley**. It is my understanding that the trading relationships and source of this gas for these various contracts can come from other sources.

For example, they have the $2.18 per MCF contract. They can trace from their areas where they are paying 21 cents per, tradeoff, then pull in the higher-priced gas.

Mr. **Yates**. Okay. Should this committee be trying to find out from one of the Agencies of Interior, maybe GS, where you can store your gas in kind that you take from the companies? Is this a GS function?

Mr. **Pendley**. We would not be taking that, Mr. Chairman.

Mr. **Yates**. You won't be taking gas in kind?

Mr. **Pendley**. No, sir.

Mr. **Yates**. Why would you not? If you can make more money by taking gas in kind, why wouldn't you do it?

Mr. **Pendley**. We will be paid fair market value for the product.

Mr. **Yates**. Okay.

Mr. **Pendley**. Frankly, Mr. Chairman, the resolution of this issue will probably be years away. We have made such decisions, on appeal to my office, and the appeal will probably be made to the Interior Board of Land Appeals, and then subsequently to a court of law.

So, we are probably years away.

Mr. **Yates**. There are billions of dollars involved, aren't there? How far back can you go?

Mr. **Pendley**. I am not sure how far back we can go, Mr. Chairman.

Mr. **Yates**. From what you are saying, the oil and gas companies were paying royalties to the Federal Government that were far less than the value of the gas.

Mr. **Pendley**. Yes, sir, Mr. Chairman. Now there is a point of course, how far back can you go? Well, how long did 21 cents per MCF constitute fair market value?

Mr. **Yates**. Right. That goes back, 3, 4, 5 years.

Mr. **Pendley**. Yes, sir. Maybe that is how long we are talking about. There was a dramatic jump.

Mr. **Yates**. There are trillions of feet of gas involved here.

Mr. **Pendley**. This is one of the reasons for the very high figures that you read in the Linowes Commission report.

PAST ACTION

Mr. **Yates**. What was GS doing about this all this time?

Mr. **Pendley**. Mr. Chairman, I can't answer that question.

Mr. **Yates**. Would somebody from GS like to answer that question?

Mr. **Frederick**. I will try that, Mr. Chairman.

Mr. **Yates**. First identify yourself.

Mr. **Frederick**. Doyle Frederick, Associate Director of Geological Survey.

My knowledge data base doesn't go back all that far, but I think I can deal with the question that you have at the moment.

The question before the committee as I understand it has to do with product value, specifically natural gas in this particular case. Let me just say a word about the magnitude——

Mr. **Yates**. Well, it includes oil as well, I would guess.

Mr. **Frederick**. Not in this particular case. The oil situation is a bit different in terms of complexity.

Mr. **Yates**. Okay.

Mr. **Frederick**. In the cases just discussed, the situation has to do with contracts, in some parts, that are binding. Gulf Oil, as an example, has binding contracts with pipeline companies out of the Gulf of Mexico to deliver gas at 21 cents.

Mr. **Yates**. Right.

Mr. **Frederick**. They have to live up to that contract. So far, the Federal Trade Commission says that is a binding contract. You must indeed do that. But the USGS had taken up that issue about 2 years or more ago, had dealt with legalities and we were pursuing the matter in terms of what was the proper decision. Is the binding contract, on the one hand, certified by a Government Agency, and on the other hand, the admonition to the Secretary of the Interior that fair market value ought to be collected.

So, we were faced——

Mr. **Yates**. That is what the statute provides.

Mr. **Frederick**. Yes, sir. We were faced with that issue. So, it was not only a matter of paying attention it was a matter of sorting out the policy for that particular issue and indeed the policy has been sorted out just recently as Mr. Pendley just described on the one particular issue.

Now with regard to other parts of the question you were asking in terms of the size——

RECENT DECISION BY SECRETARY

Mr. **Yates**. Wait a minute. You haven't told us how it was settled.

Mr. **Frederick**. How it was settled was to collect the fair market value as Perry just described. Not take the gas in kind, but calculate the value on the basis of fair market value for the gas.

Mr. **Yates**. So, what you are saying is that the Federal Government has taken the position that with respect to the contract Gulf has with its customers, as an example——

Mr. **Frederick**. As an example, sir.

Mr. **Yates**. Okay, the Federal Government is not bound by a price of 21 cents per MCF?

Mr. **Frederick**. No, sir, that is right.

Mr. **Yates**. It is entitled, indeed, to be paid for the actual value of the gas?

Mr. **Frederick**. Yes, sir, that was the decision by the Secretary.

Mr. **Yates**. Okay. Has Gulf been notified of that?

Mr. **Frederick**. Oh, yes.

Mr. **Yates**. What are they doing about it?

Mr. **Pendley**. They have appealed.

Mr. **Yates**. To whom?

Mr. **Pendley**. To the Minerals Management Service. A hearing was held and the documentation regarding that hearing and opinion is now being prepared for my signature.

Mr. **Yates**. All right. How many companies, like Gulf, are in this kind of a situation?

Mr. **Pendley**. Well, Mr. Chairman, I don't have a figure on that. I think it frankly is an anomalous situation that is part of the past because of these nonescalating contracts.

I do not think we are going to see more nonescalating contracts, given what happens to prices, and as a result of the changes made in FERC. So, I would anticipate that once these old contracts, 1964's and late sixties, get cleared up that we won't see much more of this.

But, I don't have a figure for you, Mr. Chairman.

Mr. **Frederick**. Mr. Chairman, I think that is a proper assessment. I believe there were three or four of those particular circumstances.

Mr. **Yates**. All right. Well, I sit here amazed and appalled, though, then I think of the possibility of the numbers of companies that are caught in the same kind of a squeeze that Gulf is. Gulf is limited to receiving 21 cents per MCF by its contracts with its customers, and the Federal Government, by statute, is entitled to a much greater return than that, there must be many other companies that are in that situation?

Mr. **Pendley**. There may well be, Mr. Chairman.

Mr. **Yates**. But we don't know who they are yet? Do you know whether or not the Federal Government has made settlements with any of them?

Mr. **Pendley**. Not to my knowledge. This is an aggressive initiative on the part of the Secretary only recently undertaken last September or October. We have notified all of the companies by letter of our intention and we are preparing, at this time, a Federal Register notice to be published in that regard to put them on notice.

I don't have precise figures. I can try to supply the committee with precise figures if we have them available. We may not have them until the results of our audit activities——

EXTENT OF UNDERVALUATION PROBLEM

Mr. **Yates**. Can you tell us some of the details with respect to Gulf without abridging your legal responsibilities? For example, I would assume it is in order to ask you how much of a claim the Federal Government has against the Gulf Company.

Presumably you asked Gulf for a certain amount of money, haven't you?

Mr. **Pendley**. Mr. Chairman, I have not seen the hearing record as yet.

Mr. **Yates**. Well, I will ask Mr. Frederick then. Somebody should know how much of a claim was made against the Gulf Company.

Mr. **Pendley**. Somewhere around $30 million, Mr. Chairman.

Mr. **Yates**. To cover the last how many years, 5 years?

Mr. **Pendley**. I don't have that answer.

Mr. **Yates**. Who in GS has the answer?

Mr. **Pendley**. I have with me Deputy Director for Royalty Management, Mr. Jones. Mr. Jones, do you have an answer to the Chairman's question?

Mr. **Jones**. About the number of years, no. I can confirm it is about a $30 million item.

Mr. **Yates**. This is the total claim going back over all the years, the $30 million?

Mr. **Jones**. Yes, sir.

Mr. **Yates**. How did you arrive at it?

Mr. **Jones**. We calculated what the royalty payment would have been at a fair market value over that period of time versus what they paid on the basis of the long-term contract. The difference is about $30 million. That is just with one company.

Mr. **Yates**. How many companies are involved?

Mr. **Jones**. There are several companies but there are only two big ones, Amoco and Gulf, Gulf being the larger of the two.

Mr. **Yates**. How many trillion cubic feet of gas are involved?

Mr. **Jones**. I could probably compute that.

Mr. **Yates**. How many lessees are involved?

Mr. **Jones**. Lessees?

Mr. **Yates**. Yes. How many of your companies that have leases have been producing and selling natural gas from Federal property?

Mr. **Jones**. I do not know the number, but it is a substantial number of companies.

Mr. **Yates**. Are you investigating that now?

Mr. **Pendley**. Yes, Mr. Chairman, we are. We are doing it through the letter contacts and through Federal Register notices.

Mr. **Yates**. As far as you know, there have been no settlements?

Mr. **Jones**. No, sir.

Mr. **Pendley**. The only case, the Amoco case of which he speaks, we have delivered our demand for the payment, and I imagine it will be appealed to the——

Mr. **Yates**. How much of a claim do you have against Amoco?

Mr. **Jones**. I do not know. I can find that for the record.

Mr. **Yates**. Okay.

Mr. **Jones**. It is large.

[The information follows:]

CLAIM FOR ROYALTIES AND INTEREST FROM AMOCO

On March 22, 1982,, the Acting Director, Minerals Management Service issued an order to Amoco requiring them to recompute royalties for a natural gas contract entered into between Amoco and Florida Gas Transmission Corp. The order required the recomputation of royalties on gas produced and sold after October 31, 1981, and established criteria for the payment of future royalties under the contract.

While the final determination of additional liability for underpayment of royalties plus interest will only be made when the order is final, MMS estimates that Amoco's estimated liability for unpaid royalties and interest is $37 to $40 million.

Mr. **Yates**. Mr. Frederick, did you want to proceed? Go ahead.

Mr. **Frederick**. Just one more point that might help quantify the magnitude of the issue. My understanding is that the Inspector General, as Mr. Pendley has just mentioned, has been involved, over a period of time, in doing what he has described as lookback audits. They have been paying particular attention to this question of product value.

There is another case that has just been finished where I believe the Inspector General looked at two companies. The bill for a period of I think it was 3 years, was it, Ron, for El Paso Natural Gas was on the order of $10 million. Again, this is also being challenged in terms of our interpretation of the product value of gas versus the El Paso Natural interpretation.

Mr. **Yates**. I suspect this is a question that will go to the U.S. Supreme Court.

Mr. **Frederick**. Perhaps, sir.

Mr. **Yates**. But this is not the fundamental question for which GS has been pilloried. The fundamental question that GS has been criticized for is the question of theft. Theft, improper inspection, and improper accounting of receipts. This is a question of valuation.

Mr. **Pendley**. Yes, Mr. Chairman.

Mr. **Yates**. So, this is in addition to that.

Mr. **Pendley**. Well, no, I think that is an integral part and Mr. Linowes believes it is an integral part of underreporting and underpayment. We have, as you know, two separate questions. Theft, and lack of inspection and enforcement on the Federal and Indian lands to prevent theft and——

Mr. **Yates**. I agree. It is an augmentation of the same question.

Mr. **Pendley**. It is a reason why it is underreported. Part of the reason is we don't know who the people are. We don't know where the money is coming from. Part of the problem is there is comingling. Part of the problem is people disagree on what the value is. Part of the problem is there is disagreement on the kind of costs you can subtract from the money you receive to get the product value. These are all parts of the puzzle of how much is it worth? How much do you pay the Government in royalties? So it is part of the puzzle.

ROYALTY MANAGEMENT FUNDING

Mr. **Yates**. Okay. Do you have enough money to carry on your function?

Mr. **Pendley**. We do, Mr. Chairman. We are asking for a $6.4 million increase.

Mr. **Yates**. Is that enough? You have a very important function.

Mr. **Pendley**. Yes, sir, Mr. Chairman. As the Secretary indicated in his testimony last Thursday, we are seeking a transfer of funds from the NPRA account to make it available for our requests subsequently with regard to the IG audits and with regard to the functions we are carrying out to put this new system on board.

So, we might better know what monies are coming in and who has and who has not paid.

Mr. **Yates**. We ought to keep oversight on your programs monthly shouldn't we?

Mr. **Pendley**. Mr. Chairman, the Congress has been very aggressive in this oversight functions. Unfortunately the executive branch in the past Administrations has not listened to the Congress.

As you know, the former Chairman Melcher, now on the Indian Affairs Committee, and the House Committee Chairman Rosenthal, have conducted all sorts of hearings. There has been tremendous oversight by the Congress. GAO has been very aggressive in pointing out the flaws. No one had the courage, until Secretary Watt saw this problem, to move ahead and say they are right, Congress is right, GAO is right. Something has to be done.

Mr. **Yates**. GS was tough as could be in withstanding all that Congressional assault weren't they?

Mr. **Pendley**. I do not know if it was USGS, Mr. Chairman. It was the basic function and responsibilities of the Geological Survey and their dedication to scientific pursuits. It is a separate and unique function necessitating auditors and accountants and engaging in totally different activity.

Dr. **Peck**. Mr. Chairman, the Survey moved fairly aggressively the last several years in reorganizing the function and moving towards a modern accounting system.

Mr. **Pendley**. That is correct.

Mr. **Yates**. I think maybe the record ought to be corrected a little bit, Mr. Pendley.

Mr. **Pendley**. Yes, sir?

Mr. **Yates**. The committee made available a supplemental appropriation pursuant to a request submitted to Congress by President Carter on January 15, 1981.

Mr. **Pendley**. That is correct, Mr. Chairman.

Mr. **Yates**. That supplemental related, of course, to the question of the theft and losses. An understatement.

I don't understand, I just sit here amazed. I don't understand why GS didn't pursue the problem more aggressively. It does not make sense to me. Yes?

Mr. FREDERICK. Could I respond to that, sir?

Mr. YATES. You may indeed. As a matter of fact, I would welcome a response.

Mr. FREDERICK. Thank you, sir. We do believe that GS responded, I shouldn't say overly aggressively, but we did respond fairly aggressively. We were before you last year. One of the principal subjects was royalty management, including the supplemental plus the increase in funds in the base to deal with the subject.

Back in 1978, during the time of the 1979 GAO report as it was being developed, the GS developed a panel, this was an internally managed panel, to look at the whole question of royalty management and allegations of undercollection.

As a result of our analysis and the GAO input, it was decided that indeed, something needed to be done. We had made the decision, the Geological Survey Director had made the decision to do essentially two things.

One, to redo the royalty management computer system and, two, to reorganize the Conservation Division of the Geological Survey to focus specific attention on this subject. And indeed, that was done. The system that we were planning to develop is a complex one, and we have been adding over the time, based on input from several groups, including the GAO, to make sure that we pay proper attention to that.

It is true that one of the first subjects that we brought to the Secretary's attention when he came to the Geological Survey was this whole question of theft and royalty management. He picked that up and probably moved more aggressively than any past Secretary has on that particular issue.

But, we had already in the works, a proposal for modernizing the system, a request for funds to do that, plus a reorgnization of the division. Now there have been additional suggestions made by the Linowes Commission, and those additional moves are underway. Many of them, though, were originally initiated by the Survey.

GEOLOGIC AND HYDROLOGIC HAZARDS PAMPHLET

Mr. YATES. I think we have pushed this enough for the moment. You have a beautiful pamphlet that you put out entitled, "Facing Geologic and Hydrologic Hazards." It is known as 1240B professional paper.

You discuss earthquakes, floods, volcanic eruptions, and many, many other topics. How does this get out to the public? Can they buy it, or what?

Dr. PECK. Yes. It is distributed to libraries. It is also for sale by the GPO.

Mr. YATES. What does it cost? Looks like a very expensive document.

Dr. PECK. About $5.

Mr. YATES. It is very good.

Dr. PECK. It has been used by several universities for a course study on hazards.

CONDITION OF NATION'S WATER SUPPLY

Mr. YATES. May I have somebody tell us about what the condition of the water supply is in the country? Is that your responsibility?

Dr. PECK. Yes, it is. We are pleased to discuss the matter.

Your friend, Mr. Cohen, is here. We have several posters that relate to the water situation last year and currently.

Mr. YATES. Are we in good shape, Mr. Cohen, "we" being the Nation? Would you in the course of your comments address yourself to two States in particular? One is the State of New Jersey, where the Representatives have from time to time, told me that they are troubled by seepage from the surface into the aquifer, and also Florida which I understand is having some problems too.

That doesn't mean, of course, that you are limited to those two States; I assume many other states are having problems as well. With that introduction, you may proceed.

Mr. COHEN. Your question is a far-reaching one. I will begin by referring to our testimony during the past few years relating to the drought which was of considerable concern to the country and to this committee.

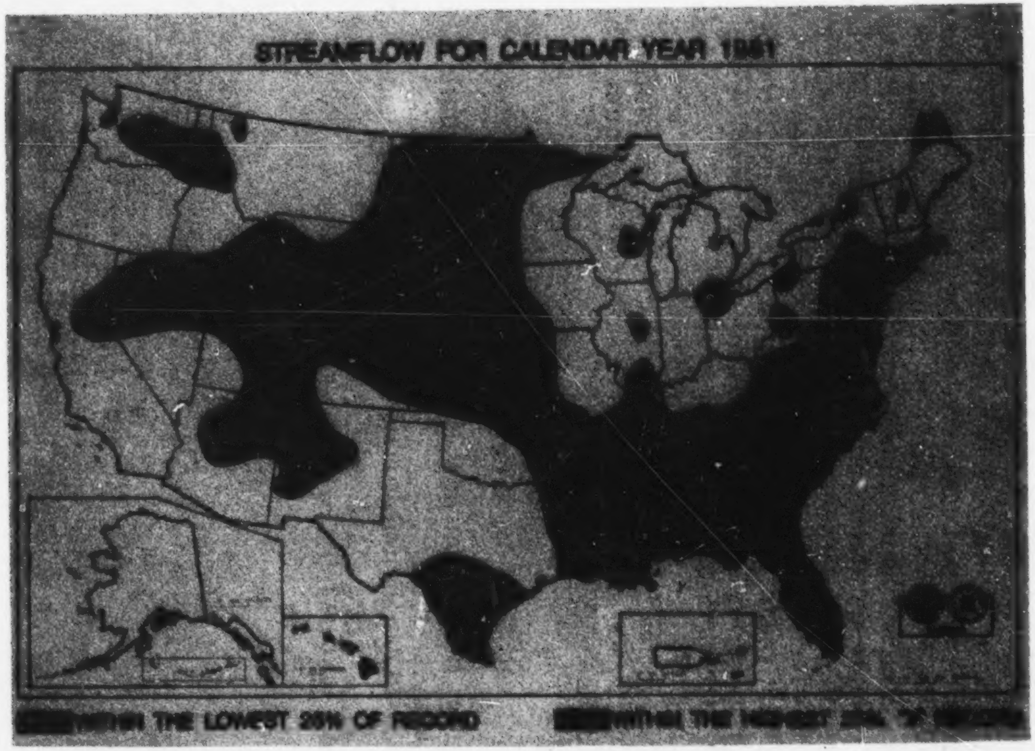
Mr. YATES. Right.

DROUGHT

Mr. COHEN. Before you now is a summary of streamflow conditions for calendar 1981.

The areas shown in red are where streamflow was significantly deficient.

[The chart follows:]


STREAMFLOW FOR CALENDAR YEAR 1981
WITHIN THE LOWEST 25% OF RECORD
WITHIN THE HIGHEST 25% OF RECORD

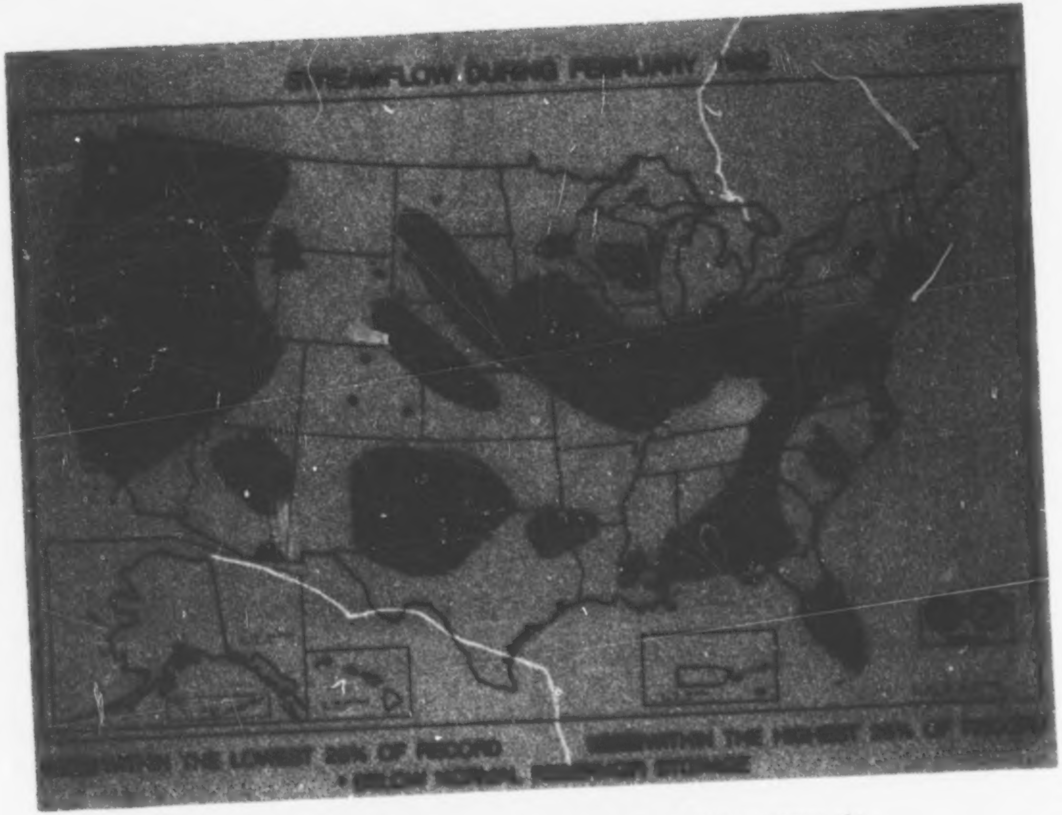
This map indicates that during 1981, a broad band of deficient streamflow (within the lowest 25 percent of record) stretched across the eastern part of the United States from southern New York to Florida and as far west as eastern California. Although the Nation's water picture improved in the closing months of the year, it was not enough to offset the extreme low flows over much of the nation during the first half of the year and, in particular, the normally high flow months of March and April.

Geological Survey
Chart W-229-82

It was within the lowest 25 percent bracket on the average. You can look at a rather severe wide-spread drought condition as measured by deficient streamflow throughout the United States in calendar 1981. You will recall the drought probably began in the summer of 1980. The summer of 1981 was another summer of drought.

Contrast that with the situation, using the same criteria, as of the end of February 1982. We see a dramatic reversal of the drought conditions. That began at about the beginning of calendar 1982 with heavy precipitation along the west coast associated as you may recall with severe landslides, and some loss of life in the San Francisco Bay area.

[The chart follows:]


STREAMFLOW DURING FEBRUARY 1982
WITHIN THE LOWEST 25% OF RECORD
WITHIN THE HIGHEST 25% OF RECORD
• BELOW NORMAL RESERVOIR STORAGE

This map indicates that in February, streamflow conditions across the country in general took a strong upturn with many streams reaching their highest flows since June 1981. Monthly mean flows at index stations in Illinois, Rhode Island, and in the Pacific Northwest were highest of record for February.

Geological Survey
Chart W-231-82

More recently, significant flooding occurred in the States adjacent to the Great Lakes and some of the Southwestern States. However, we still see some, albeit quite small, areas of drought, some related to local phenomena which do not have significant carry through implications.

However, the southern half of the Florida peninsula still is an environment of severe drought. I might add that that was probably tempered significantly during the past 2 days. Precipitation in West Palm Beach was reported at ten inches over 24 hours some days ago. That brings some relief. However, based on the data we have now the situation still is moderately severe in Florida.

Mr. YATES. What does that do with respect to the Everglades National Park?

Mr. COHEN. The situation in the Everglades prior to this heavy incident of precipitation was very severe. They were in a very, very dry condition—record low measurements in many of the lakes associated with the Everglades and on the Everglades, themselves.

FLORIDA'S WATER SUPPLY

Mr. YATES. There is an underlying water table isn't there, in Florida?

Mr. COHEN. Much of the public water supply in Florida is developed from the underground system, the so-called ground water reservoir.

Mr. YATES. Is there salt water intrusion of that aquifer?

Mr. COHEN. Yes, along the coast heavy pumpage does induce landward migration of salty ground water. This is a natural phenomena which in effect can't be avoided. If one installs large wells near the seashore, the physics of the system demands that salty water moves inland.

The Survey, and many of the local and State agencies, have been monitoring that phenomenon very carefully for more than 2 decades.

Mr. YATES. What about the question of population, do population increases verify that?

Mr. COHEN. Yes, as population increases, the amount of ground water withdrawal increases, and the rate of landward movement of salty water increases. Fortunately that rate of movement is very, very slow and one can monitor it and make management decisions. Nonetheless, it is occurring.

Mr. YATES. Florida, of course, has one of the greatest percentages of immigration of any of the States. I was just wondering whether the water supplies would be adequate to support the population.

Mr. COHEN. It has a very vast and productive underground water system. Some very sophisticated management tools have been developed for many decades. For example, reinjection of sewage into the ground in strategic locations achieves certain management goals.

GROUND WATER CONTAMINATION IN NEW JERSEY

The other question you raised relates to the situation in New Jersey and the situation we see throughout the United States. In fact, you are correct. New Jersey is getting an extensive amount of consideration and notoriety regarding ground water contamination. In any of the large industrial areas of the United States or heavy metropolitan areas where one relies significantly upon ground water there is the question of disposal of the ground water once it is used.

You have a heavy industrial complex in New Jersey, largely associated with the petrochemical industry, withdrawing large amounts of ground water and producing chemical wastes.

In the past, as a matter of fact, at present, much of those chemical wastes are returned back to the ground. That same prolific body of sand and gravel that yields large supplies of water also accepts large supplies of waste water. These things tend to go hand-in-hand. It is a matter of historical development. This is the kind of thing you see throughout the world as a matter of fact.

So, New Jersey does have a serious ground water contamination problem.

DISPOSAL OF HAZARDOUS WASTE

Mr. YATES. I suppose as part of your remarks you ought to tell us what we have done and should be doing with respect to disposal of hazardous chemicals and products or isn't that your bailiwick?

Mr. COHEN. It is our bailiwick in the sense of developing a firm scientific foundation for understanding these phenomena.

Mr. YATES. Right. Your predecessor, Joe Cragwall, had the task of trying to deal with disposal of nuclear waste. Is that yours now?

Mr. COHEN. Geological Survey has several program components on that issue and some of it is in the Water Resources Division.

Mr. YATES. Do you know how to dispose of nuclear waste?

Mr. COHEN. The United States, as a matter of fact, no other country that we are aware of has achieved the final solution to the ultimate—to the disposal of high level nuclear wastes.

Mr. YATES. You say it has not?

Mr. COHEN. To the best of our knowledge, no Nation has achieved the so-called final solution that is satisfactory to the scientists, satisfactory to the politicans, and satisfactory to the Nation.

Mr. YATES. A few years ago it was thought that the salt domes would be the place to deposit it.

Mr. COHEN. The Department of Energy is, in fact, looking at salt domes and two or three other media very intensively as candidate repositories.

Mr. YATES. What is your conclusion?

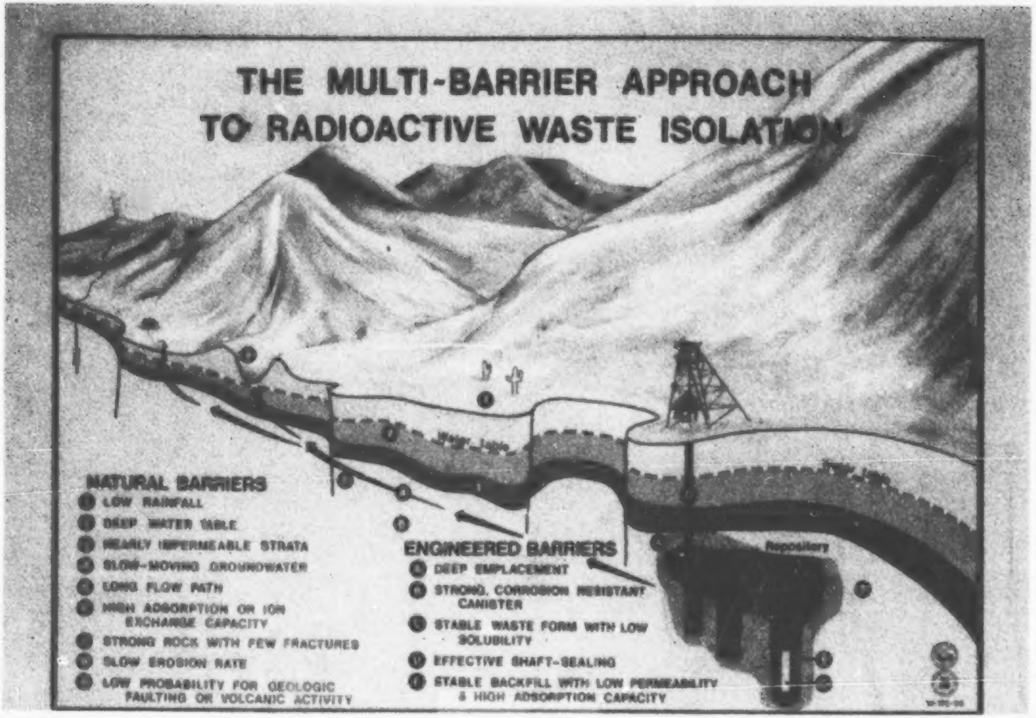
Mr. COHEN. Investigations to date have not demonstrated conclusively that any of the media being examined are in fact suitable at the present time.

Mr. YATES. Are not suitable?

Mr. COHEN. We have not yet demonstrated that a particular environmental or a particular geographic location is in fact suitable. There is a lot of work moving in that direction.

Mr. YATES. One of the movements was that chart you put on the stand there. Can you explain that?

[The information follows:]


THE MULTI-BARRIER APPROACH TO RADIOACTIVE WASTE ISOLATION
Water table
Repository
NATURAL BARRIERS
LOW RAINFALL
DEEP WATER TABLE
NEARLY IMPERMEABLE STRATA
SLOW-MOVING GROUNDWATER
LONG FLOW PATH
HIGH ADSORPTION OR ION EXCHANGE CAPACITY
STRONG ROCK WITH FEW FRACTURES
SLOW EROSION RATE
LOW PROBABILITY FOR GEOLOGIC FAULTING OR VOLCANIC ACTIVITY
ENGINEERED BARRIERS
DEEP EMPLACEMENT
STRONG, CORROSION RESISTANT CANISTER
STABLE WASTE FORM WITH LOW SOLUBILITY
EFFECTIVE SHAFT-SEALING
STABLE BACKFILL WITH LOW PERMEABILITY & HIGH ADSORPTION CAPACITY

The diagram shows the occurrence in the natural environment of multiple barriers to the transport of waste radionuclides. The term MULTIPLE BARRIERS refers both to manmade barriers and natural barriers in the form of hydrodynamic, geochemical, and geologic characteristics that would impede radionuclide transport. The USGS program stresses the concept of multiple barriers in order to overcome limitations in the precision with which geochemical reactions, natural geologic events, and transport mechanisms can be predicted. A major objective is the identification of environments where such a series of independent and redundant natural barriers occurs.

Geological Survey
Chart W-195-80

Mr. **Cohen**. Yes. This is a chart you saw 2 years ago, you will recall, when Mr. George DeBuchannane first introduced the concept of the multiple barrier approach to storage and/or disposal of radioactive waste. It tries to illustrate the point that there are any number of natural barriers within the earth's surface that would tend to preclude or limit migration of radionuclides.

The theory is a fairly simple one. When one can locate several of these barriers which operate redundantly, the chances of confining these materials increase dramatically.

Now, in the Geological Survey, we have an ongoing program in which we are testing the application of this concept to a fairly large part of the United States, the Basin and Range Province of the western part of the United States, to help delineate target areas for the selection of disposal sites.

DIABLO CANYON NUCLEAR PLANT

Mr. **Yates**. Has GS worked with NRC on licensing nuclear reactors?

Mr. **Cohen**. My answer is yes. Mr. Devine is more expert in that area than I am.

Dr. **Peck**. Yes, Mr. Chairman.

Mr. **Yates**. The answer is yes?

Dr. **Peck**. Pardon?

Mr. **Yates**. Does NRC require its applicants to get a permit, or an approval from USGS prior to location of a plant?

Dr. **Peck**. It does not get a permit from us but we review the application to the NRC at NRC's request.

Mr. **Yates**. Did you also approve Diablo Canyon?

Dr. **Peck**. We were involved in the review of the case.

Mr. **Devine**. Yes.

Mr. **Yates**. Subsequently or preceding it?

Dr. **Peck**. Mr. Jim Devine, who is aching to help me, is particularly well informed on Diablo Canyon.

Mr. **Devine**. Yes. We have been involved as advisors to the Nuclear Regulatory Commission from the very beginning on Diablo Canyon, and have been consistently involved throughout its long and sordid history.

Dr. **Peck**. In the geologic aspects, not the engineering aspects.

Mr. **Devine**. Exactly. Our advice is limited to the geologic and seismologic aspects to the plant. We have some interface with the engineers on how our information gets used but we do not approve or get involved with design of the facility.

In the case of Diablo we were involved in the original evaluation, or original review of the application, and it was the Geological Survey that notified the then AEC that there was a geologic hazard offshore in excess of that known at the time of the construction permit. We participated in an additional review done by the applicant to identify the degree of the geologic hazard now understood, and to some degree, how that information was then used in modification and redesign of the plant.

We did not participate in evaluating how well the plant was redesigned to withstand that hazard. That is not our role but we did participate in identifying the geologic hazard.

Mr. **Yates**. Was the permit issued by the Atomic Energy Commission even though you told them of the existence of the fault?

Mr. **Devine**. The original construction permit was issued prior to an awareness of the structure and its significance.

Mr. **Yates**. Subsequently, as I recall previous testimony before the committee, you were called in to determine, as I remember, whether or not the engineering corrections that were made were adequate to withstand any quake from Diablo Canyon. Is my memory correct?

Mr. **Devine**. That is not quite right. Our expertise is not in the engineering design of a structure, but in identifying the degree of geologic and seismologic hazard and how that gets used by the engineers.

We are geologists and seismologists; not engineers. Consequently, our testimony was limited to the amount of ground motion one could expect, how often it should be, what the shape and character would look like and where it would come from, how far away and so on. Not in how much rebar they used in supporting the facility.

REACTOR SITES AND GEOLOGIC HAZARDS

Mr. **Yates**. Are there any other nuclear plants constructed on or close to faults?

Mr. **Devine**. In various degrees, yes, sir.

Mr. **Yates**. Because there are so many faults throughout the country?

Mr. **Devine**. That is partially it, and partially the need for cooling water on the West Coast requires you to put the facility near the ocean. And that happens to be, in California, where the majority of the faults are. The other aspect of it, sir, is when you make a detailed investigation of any area, you frequently find significant geologic features you do not know about beforehand. That has been the case in a few instances in the eastern United States.

Mr. **Yates**. Yes. On page 81 of the justification, there is a map of the United States which indicates where proposed reactor sites are and where hazards exist. Do you have to determine whether at those locations geologic hazards do exist?

Mr. **Devine**. We review the applicant's investigation to determine if they have determined that adequately, yes, sir.

Dr. **Peck**. We also carry out a reactor hazards program of background studies, in part aimed at gathering a knowledge of the geology hazards in broad areas where there may be a reactor site and also better ways of dating faults to see whether a fault is active or how recurrently active.

RADIOACTIVE AND TOXIC WASTES

Mr. **Yates**. Are you the one who works on the salt domes to see whether or not they would withstand leakage for nuclear waste?

Mr. **Devine**. No, sir. I have some oversight on that subject, but I am not the one that worked directly on it, as I was on the power facilities. That is largely a hydrologic problem. Better address that to one of our hydrologists if you have detailed questions on it.

Mr. Yates. Well I was just going to say, can you tell whether there are leaks in that without coming back, say, 250,000 years from now?

Mr. Devine. Well, some of the work being done by Mr. Cohen's office is to assess the techniques for determining the migration of radionuclides in the surrounding medium.

Mr. Yates. Then we want Mr. Cohen back then, don't we? Mr. Cohen, tell us about the wandering nuclides. What have you learned so far?

Mr. Cohen. In addition to high-level radioactive waste studies we are doing work with low-level waste studies.

Mr. Yates. Do you also go beyond low-level waste into chemical problems.

Mr. Cohen. Yes, sir.

Mr. Yates. PCB's and things of that sort?

Mr. Cohen. As a matter of fact the present fiscal year is the first year in which we are formally funded in a program in which we are concerned with nonradioactive toxic wastes. As Dr. Peck said in his opening remarks we are requesting a significant increase in the program for fiscal year 1983 regarding nonradioactive toxic wastes.

Mr. Yates. Is that a countrywide problem?

Mr. Cohen. It is. As I tried to indicate in my earlier statement, one can generally associate heavy concentrations of toxic wastes with heavy withdrawals of water which are associated with large population centers. At virtually every large population center, if one takes the trouble to look, you will find toxic wastes.

These are associated with so-called sanitary landfills which have been in operation for hundreds of years, and include problems that have received more recent notoriety such as those associated with the burial of new organic compounds that have just been developed in the last several decades.

Mr. Yates. Have there been any major contaminations of aquifers as a result of nuclear chemical, toxic waste?

Mr. Cohen. Yes, we have identified numerous areas of significant contamination of aquifers with both radioactive and nonradioactive waste.

Mr. Yates. Do you have such a chart?

Mr. Cohen. We do not have a chart showing the location of such sites. We can provide information for the record.

Mr. Yates. She has a chart.

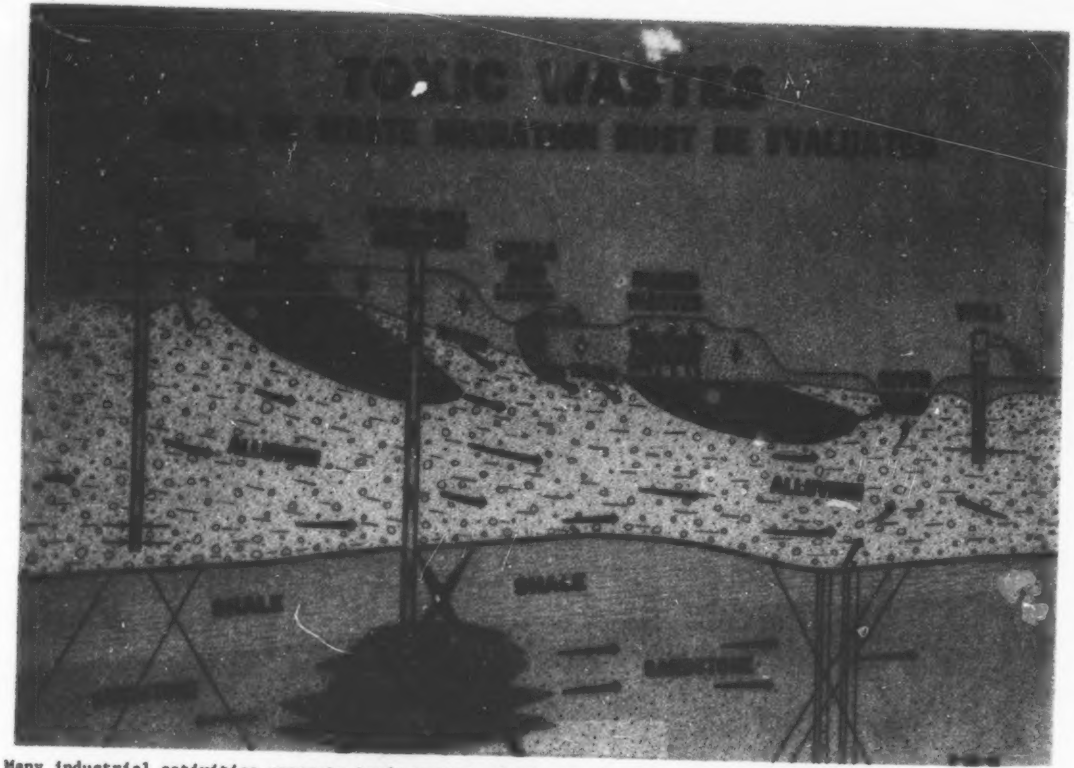
Mr. Cohen. It isn't the chart, sir.

Mr. Yates. What is it?

Mr. Cohen. The toxic——

Mr. Devine. The process. The chart of the process, not the sites.

[The chart follows:]


TOXIC WASTES
WASTE MIGRATION MUST BE EVALUATED
ALLUVIUM
ALLUVIUM
SHALE
SHALE
SANDSTONE
SANDSTONE

Many industrial activities generate toxic wastes, which must be disposed of safely and at a reasonable cost. However, the risks of waste migration in flowing ground water are rarely evaluated adequately. This diagram illustrates several ways that toxic wastes can enter a ground-water system, and in turn, contaminate water-supply wells and surface waters. Ground-water contamination results in increased costs to industry and hazards to public health. The Geological Survey's program is designed to develop reliable and transferable methods to predict contaminant movement, so that management options can be evaluated and innovative approaches to mitigating ground-water contamination can be developed.

Geological Survey
Chart W-211-81

SOURCES OF GROUND WATER CONTAMINATION

Mr. COHEN. This chart speaks to the point I tried to make a few moments ago about the many ways in which toxic contaminants have and will continue to enter ground water systems. What we have tried to demonstrate here is a whole host of more common ways by which these materials reach the ground water table. Disposal ponds have been and continue to be used by industry to "dispose" of waste water.

Deep injection wells have been used in many places to dispose of especially noxious compounds. Accidental spills and leaks are shown. Also burial of drums of toxic chemicals such as at Love Canal is illustrated on the chart.

These drums eventually rust out and these materials find their way into the water table. So, these types of occurrences are known throughout the United States. There are literally hundreds, probably thousands, documented. Some, for example, are associated with individual feedlots where nitrates enter the ground water. Nitrates can be highly toxic especially to infants and so on.

Mr. YATES. One of the areas I am interested in is Waukegan Harbor, where they have a big, bad collection of PCB's. Do you have anything to do with that?

Mr. COHEN. I am not familiar with that particular——

Mr. YATES. Is that strictly Corps of Engineers?

Mr. COHEN. I am not familiar with the particular site.

Dr. PECK. One thing is, we have, EPA has a lead role in a lot of this problem having to do with nonradioactive toxic waste. Over the last year we have established a much improved working relationship with EPA. We established a coordinating committee that meets periodically. We signed a memorandum of understanding relating to our helping them in a number of the specific toxic waste site specific problems.

Mr. YATES. The description that you use, alluvium, is that aquifer?

Mr. COHEN. That is a geologic term which generally refers to unconsolidated deposits of sand, gravel and clay and where those deposits are in fact saturated with ground water, we then use the term aquifer.

Dr. PECK. You will recall the alluvial valley floors was a big issue in strip coal mines.

Mr. YATES. Can those be corrected? Those incursions or invasions, can they be corrected in time if they are removed? Or does it depend on the chemical and on the toxicity of the deposit?

Mr. COHEN. In theory, many of these types of phenomena can be corrected. In practice, it probably would be economically prohibitive to do it. One can, for example, in this particular case design a network of wells and attempt to pump all of the contaminated water back to the surface, treat it and dispose of it.

As a matter of fact, that is being done in some locations but it is a very, very expensive process, largely because it involves enormous amounts of time required to remove these plumes of contaminated ground water. It is very, very costly, and society as a whole, with significant contributions from the Geological Survey and other agencies, is just beginning to collect the quantitative data that will allow decisionmakers to determine if in fact these bodies of ground water should be abandoned or if attempts should be made to improve the situation or in some cases rectify the situation.

Mr. YATES. We have seen what has happened with Love Canal and a number of other places. Are we taking steps to correct and avoid that in the future?

Mr. COHEN. I think so. I think the EPA and the local and State counterparts are taking very vigorous steps to alleviate the problem. The most important step is to prevent the contamination from occurring in the first place.

In order to do this one has to have a general understanding of how the processes work.

NUCLEAR WASTE DEPOSITORIES

Mr. YATES. Let's have an understanding. Morris, Illinois, which is fairly close to the Chicago metropolitan area, is supposed to be a depository for nuclear wastes. There is a temporary storage area there under contract, I think.

Mr. COHEN. Sheffield.

Mr. YATES. I do not know which company it is. What happens to those deposits, does anybody know?

Mr. COHEN. I am sorry, I don't understand the thrust of your question.

Mr. YATES. There is a depository there now, a storage area for nuclear wastes. How is that contained? Do they know whether it is being contained or whether it is leaking?

Dr. PECK. Low level waste site? Do we need Jack Robertson?

Mr. YATES. I thought at the Morris facility they were going to make it permanent.

Mr. ROBERTSON. That is a facility for storage of spent reactor fuel.

Mr. YATES. That is high-level?

Mr. ROBERTSON. Yes, that is high-level waste in that sense, yes.

Mr. YATES. How is it being stored?

Mr. ROBERTSON. It is being stored in swimming pool type storage facilities. Every reactor has a similar storage facility for spent nuclear fuel.

Mr. YATES. Does it leak from the bottom of that swimming pool?

Mr. ROBERTSON. It is not supposed to and I do not know, I haven't seen any evidence that it is leaking, at Morris or any of the others.

Mr. YATES. How do we know whether it is leaking or not?

Mr. ROBERTSON. There is generally a monitoring system immediately around the building containing these facilities, and they are closely—the ground water is closely monitored.

Mr. YATES. I think we had better get a description of that. Let's adjourn now and talk about it at 1:30.

AFTERNOON SESSION

WIND RIVER ALLOTTEES

Mr. YATES. We have your partner, haven't we?

Mr. **Pendley**. Yes, sir, Mr. Chairman. Roy Sampsel is Deputy Assistant Secretary for Indian Affairs, with us here to discuss your concerns with regard to the Wind River Allottees and their request of the Department.

Mr. **Yates**. Tell us what is going on there at Wind River, can you?

Mr. **Sampsel**. Sure. Mr. Chairman, this issue started, oh, I would say about a year ago February. The Allottees were requesting assistance in terms of an audit and having some work done because of the possible conflict that might exist between the Allottees and the tribes. The tribes agreed that there should be assistance given to the Allottees Association in terms of getting this information. So, there has never been a conflict between the tribes and the Allottees Association or the access of information between their attorneys and the Allottees attorneys.

Now, what happened was that there was a request in February for some assistance in terms of funding. That assistance was guaranteed. The issue arose again in July.

Mr. **Yates**. Guaranteed by whom?

Mr. **Sampsel**. At the area level by the Area Director, and his staff in Billings, Montana.

Mr. **Yates**. What do you mean by guarantee?

Mr. **Sampsel**. They said they would do it, that there was money available, that it could be done and was a proper use of funding.

In July, there was another meeting. That was my first association with the issue. There was another meeting in September and one again in December. To explain totally, there is no disagreement within the Bureau, or the Department, that the work for the Allottees needed to be done, nor was there disagreement between the Allottees and the tribe.

CONTRACTING DIFFICULTIES

So, we had total agreement with everybody except our contracting process. The contracting officer and our field solicitor—I see some of you have had contracts.

Mr. **Sampsel**. And they simply said that this was a wonderful idea, but they couldn't justify the sole source selection of this particular group to do the work.

Mr. **Yates**. What group?

Mr. **Sampsel**. The attorney——

Mr. **Yates**. For the Allottees?

Mr. **Sampsel**. For the Allottees. In other words, that if it was going to be done, it should have been bid competitively as opposed to having them selected individually.

Mr. **Yates**. I don't understand that. Do you mean the Allottees aren't allowed to select their own lawyer?

Mr. **Sampsel**. The question was from a technical standpoint whether or not it was in fact an attorney contract. The answer is, of course, they could select their own counsel, but was this in fact an attorney contract. So, as it bounced back and forth within the system, what happened was that while everybody agreed, there never was a signed contract or agreement. And the funds have never been expended.

Mr. **Yates**. What happened to the Allottees, they are still waiting?

Mr. **Sampsel**. Well, the Allottees on the faith of counsel got the work done, but the counsel who provided the work has never been paid.

Mr. **Yates**. Why don't you pay him?

Mr. **Sampsel**. We are looking for a way in which to do that. I am told now that I have to seek some special authority by which to clear up the contracting issue since the work has been performed without a Federal contract and, so it is an after the fact action.

But, it is not, let me clear up this particular issue. It is a contracting error and a mistake in the administration, not a mistake in a commitment to the Allottees to get for them the information they needed in order to protect their interest.

Mr. **Yates**. They are protected then?

Mr. **Sampsel**. Yes, sir.

Mr. **Yates**. Except they have a claim against them by their lawyer.

Mr. **Sampsel**. That is right. That is something their lawyer, the tribe, and I will try to work out through the administrative processes available through the Department.

Mr. **Yates**. But you have been working it out for over a year.

Mr. **Sampsel**. No. We have been talking about it but we have not worked it out.

Mr. **Yates**. I said you have been working it out. I didn't say you worked it out.

Mr. **Sampsel**. That is correct.

Mr. **Yates**. What happens? The lawyer has to wait? Is there any question but the lawyer did the work well?

Mr. **Sampsel**. No, there is not. The question is now the procedure that is used. In other words, he has a legitimate claim. He did the work. He did it on good faith.

Mr. **Yates**. Yes.

Mr. **Sampsel**. If he had been doing it on less than good faith, he probably shouldn't have performed the work without an actually signed contract. But the problem was a contracting problem, not a commitment to the Allottees.

Mr. **Yates**. How many other Indian tribes or Indian groups, want to hire their own lawyer?

Mr. **Sampsel**. Oh, a great many.

Mr. **Yates**. In questions like this?

Mr. **Sampsel**. It varies.

Mr. **Yates**. I mean we are interested only in the question of protecting the Indian tribes, or Allottees, from the results of the thefts or losses.

Mr. **Sampsel**. We have no other requests for funds, at this time, other than the request for funds for this particular activity.

Mr. **Yates**. What do you do about tribes who ask for help?

Mr. **Sampsel**. If they ask for it specifically outside of their, say, normal attorney contract which we approve, then we have a review procedure we go through to determine whether or not the funds are available, and whether there is a conflict with the United States in terms of asking for them. But we haven't had that request except for the Allottees. And yet, there was really a question between the Allottees and whether or not they would have a problem with their tribal government.

TRUST RESPONSIBILITY FOR INDIAN LEASES

Mr. YATES. What is happening with respect to the various tribal governments? Is that what Mr. Pendley is taking care of? Are you working on that?

Is there a possible conflict between you and Mr. Pendley?

Mr. SAMPSEL. No, I don't believe so. All of the policy overview in terms of establishing this particular office and in the staff implementation has been very closely coordinated.

Now, there are some problems in terms of how we are going to deal with issues down the road, and that is in terms of who is going to have royalty management total responsibilities of how you do that in relationship to lease compliance and lease management. But no problem in terms of knowing that those things exist and the process by which we are going to work out the suggestions that have been made both by the Commission and by numerous tribes throughout this process.

Mr. YATES. Is it your responsibility to protect the Indian tribes or is it Mr. Pendley's?

Mr. SAMPSEL. It is my responsibility in the Bureau of Indian Affairs to maintain that trust responsibility.

Mr. YATES. Are you in charge of trust responsibility?

Mr. SAMPSEL. Yes, we are. In this particular case we have a royalty responsibility which is there and coincides with the total management. There are a number of proposals now in which we will have some of this monitoring done, partially by the tribe and in coordination with Perry's shop.

But, we haven't gotten to those individual agreements yet.

Mr. YATES. What was it, 28 tribes we talked about?

Mr. PENDLEY. Mr. Chairman, I gave the figure of 24 tribes producing oil and gas.

Mr. YATES. You are in charge of protecting their interests?

Mr. SAMPSEL. Yes. We have the overall trust responsibility for the lease management.

Mr. YATES. Have any of the tribes asked you to protect their interest in connection with these losses, or are you doing that on your own?

Mr. SAMPSEL. In terms of official requests we have had—let's take the petition currently before us for the Wind River Tribe which is asking for the cancellation of the Amoco leases based upon the fact that there was a violation.

We have done two things. First, we have asked MMS to review the technical information both from the company and the tribe's petition. That information they have done. They have made a report to us in the trust office. We have also asked our trust officers to review it, but the decision on whether the lease is to be revoked is our decision.

The MMS staff are our technical advisors on that situation. They technically review. I would like to call it a fairly workable partnership, in which they have the technical expertise, and we rely on that technical information, but exercise an independent trust responsibility.

Mr. YATES. What is happening with respect to the 24 tribes? Are you going ahead to try to collect their losses for them, or are you going to wait until they ask you to do it?

Mr. SAMPSEL. That is a question in which we know that there have been losses. We will try to collect those losses. I am informed that there is currently, as it related to Wind River particularly, a grand jury that is currently taking place in Billings, Montana.

I don't have the details on that in terms of what our legal position is and how we are legally pursuing it. But, from a policy standpoint, the answer is yes, we would make recommendations and the solicitor would begin to start the movements through the legal processes to collect the funds once they are identified.

Mr. YATES. But this is bigger than Wind River.

Mr. SAMPSEL. Oh, yes, it is. All I am saying is these processes——

Mr. YATES. You specified Wind River, but I think the question is: What are you doing with respect to protecting the interests of the other tribes, other than the Arapaho and Shoshone?

Mr. PENDLEY. Mr. Chairman, if I could respond.

Mr. YATES. Of course.

Mr. PENDLEY. Roy has talked about litigation and so forth. Let me speak from the regulatory side. That is that MMS is continuing its activities with regard to performing these inspections that are required, and to go out and insure site security and verify production that takes place.

At the same time, we have an aggressive lookback audit function going on with our Inspector General to uncover with regard to company-by-company underreporting that would affect some tribes on the various leases.

We have, as well, an audit going on by MMS with regard to Amoco on the Wind River to find losses there. At the same time, we have this new system coming in that we are putting in that will insure the reliability of the reporting of all royalties, not just on Federal lands, but Indian lands as well.

So, from the regulatory side we are trying to achieve the objectives of the Secretary's trust responsibilities in order to enforce them, and that is to insure proper collection of all the royalties and return them to the tribes.

Mr. YATES. Is there anything else you should tell me or shall we wait until BIA comes in?

Mr. SAMPSEL. Let's wait until BIA comes in.

Mr. YATES. Let's do that. Thank you for coming in.

Mr. SAMPSEL. Thank you, Mr. Chairman.

TOXIC WASTES

Mr. YATES. Before we broke for lunch, up to our necks in toxic wastes, weren't we? Mr. Robertson, what are you doing that you should be doing and what are you doing that you shouldn't be doing?

Mr. ROBERTSON. Mr. Chairman, I presume you are talking about the field of toxic wastes.

Mr. YATES. Yes, tell us what the Nation faces.

Mr. ROBERTSON. The toxic waste problems in the Nation are very significant problems. They cross State lines, they cross community and county lines. Virtually every community in the country is faced with some type of ground water contamination problem. A few million people have lost their water supply wells due to toxic contamination in recent years. There are some 10,000 or more toxic waste sites in the country contributing to contamination. There are some 200,000 landfills contributing to ground water contamination and numerous other leaks and spills, midnight dumps, and so on.

So, it is a significant problem. It is affecting a very important resource, our ground water resource, which half the people in the country rely on.

STORAGE FACILITIES FOR SPENT REACTOR FUEL

Mr. YATES. Right. When we recessed for lunch, I had asked you about Morris, Illinois. You had indicated that there is a storage tank for spent fuel in the nature of a swimming pool containment as it were.

Does this mean the spent fuel is in water in that swimming pool?

Mr. ROBERTSON. Yes, that is the standard storage procedure for spent fuel.

Mr. YATES. Are there many such installations?

Mr. ROBERTSON. Virtually every power reactor has one to store spent fuel as it is taken off the reactor. There are a few other facilities.

Mr. YATES. That is in the vicinity of the reactor itself though, is it not?

Mr. ROBERTSON. Yes.

Mr. YATES. Morris, Illinois, as I understand it is not such a place.

Mr. ROBERTSON. No. There are a few places outside the reactors that were set up as storage facilities for reprocessing of fuel. Reprocessing policy never got established. There were attempts to do so at at least three different locations in the country.

Mr. YATES. With respect to that swimming pool, is it concrete? What is its composition? How do you know that it would protect against leakage?

Mr. ROBERTSON. This is an area I don't have firsthand knowledge in.

Mr. DEVINE. I can answer that. Swimming pools for spent fuel go through the same review process as the other class one components of a reactor site. Consequently, they have to establish the demonstration that the plant can withstand the average lifetime of a facility which is about 40 to 50 years with the same criteria as the power reactor, the other class one structures.

It is licensed in the same manner. So, there is a high degree of confidence by the time the license is obtained that the facility is coherent and will remain coherent throughout the life of the plant.

Mr. YATES. 50 years is nothing in terms of the half-life of the fuel though, is it?

LONG-TERM STORAGE OF NUCLEAR WASTE

Mr. DEVINE. Well, that storage site is not intended to be used for the entire life of the fuel.

Mr. YATES. How long is it intended to be used?

Mr. DEVINE. Normally the life of the reactor site which is about 40 to 50 years.

Mr. YATES. What is to be done with it after that?

Mr. DEVINE. The intent is to transfer it to a permanent repository which has yet to be developed.

Mr. YATES. Oh.

Mr. ROBERTSON. It is either to reprocess the fuel or dispose of the fuel as waste.

Mr. YATES. Reprocess or dispose of it as waste.

How do you dispose of it as waste? That is what you haven't decided yet, is that correct?

Mr. ROBERTSON. That is the Department of Energy's principal responsibility. We assist with the earth sciences of the disposal.

Mr. YATES. But they don't know anything you don't tell them, do they?

Mr. ROBERTSON. We certainly do advise them on that—and have our own program in developing the earth science information needed for the proper waste disposal decisions. We are not involved in the engineering aspects much in the swimming pool storage or other storage facilities.

Mr. YATES. Are we just delaying the fatal day, 50 years away?

Mr. ROBERTSON. Certainly there will have to be an ultimate disposal site and the Department of Energy is pursuing that. We have a corollary program to develop that information.

Mr. YATES. This committee has been pursuing an answer for 10 years. And we haven't been able to get an answer yet as to how you dispose of that waste. Mr. Cohen has an answer.

Mr. COHEN. The earth science community has been worried about this problem, in a formal sense, for at least 3 decades.

Mr. YATES. And they are still worried about it?

Mr. COHEN. It is an extremely complex problem. As you pointed out, we are dealing with hundreds of thousands of years within the framework in which our accuracy to predict geologic phenomena is less than desirable. Moreover, there are questions related that go beyond the physical earth sciences—the degree of risk society is willing to take and so on.

I think it is fair to say that we will never be able to site a facility, at least in the context in which we are viewing it right now, which has zero risk. Because of the nature of the problem the earth science community is looking very, very carefully and in very great detail.

As indicated in earlier testimony, if one looks carefully enough, one can find a fault almost anywhere.

DISPOSAL OF OLD NUCLEAR SUBMARINES

Mr. YATES. True. I read in the paper that old nuclear submarines are now supposed to be disposed of in some way. Does the Navy ask you how to get rid of their nuclear subs?

Mr. COHEN. I think I read the same article. The issue discussed there was the option of disposing of submarines in deep ocean trenches or handling the radioactive materials in other ways.

At the present time, the Navy does have facilities on land in Idaho to handle some of the radioactive wastes associated with their reactor program. The question in that particular article was whether or not to use that facility, or to dispose of virtually all of the submarine except for the reactor core in deep ocean trenches.

Mr. YATES. But I think the whole submarine is contaminated, isn't it? As I remember, the article's thrust was that the Navy proposed to remove the most highly radioactive components of the submarine including the core and immediate shielding and then dispose of the submarine.

Mr. COHEN. Yes, in fact that is where the environmental question comes to the fore. The submarine would be radioactive.

Mr. YATES. Do you have to make a recommendation in this respect? Is it better to put the submarine into one of your swimming pools or to bury it in the ocean?

Mr. COHEN. We have not been involved, thankfully, in addressing those issues, but we have supported the Navy in their facility in Idaho for more than 2 decades to help address questions in our expertise. We are looking at what happens in the subsurface and are doing that now.

Mr. YATES. What is happening in Idaho? First, what is deposited there, spent fuel?

Mr. ROBERTSON. Let's get back to the submarine for a second, or what is considered the contaminated sub or contaminated parts, generally the whole submarine is not contaminated.

Contaminated parts are considered low-level waste as opposed to more strict definition of high-level waste.

Mr. YATES. Is the submarine contaminated as it proceeds through its useful life?

Mr. ROBERTSON. Certain parts are, associated with the reactor. The rest of the submarine is generally very clean.

Mr. YATES. Is it?

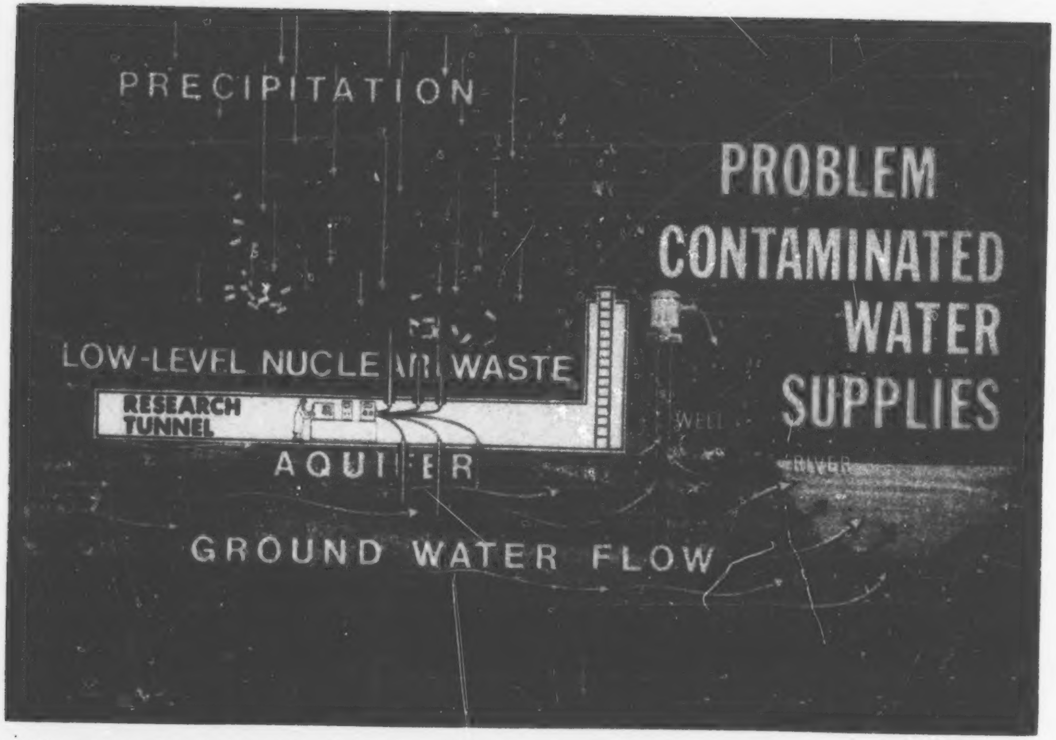
LOW-LEVEL DISPOSAL SITES

Mr. ROBERTSON. Yes. Those types of materials are being disposed of in land disposal sites already, low-level waste sites. We have a number in the country. The Navy, the Idaho facility, uses one of those sites. There are commercial sites such as the one in Sheffield, Illinois, that have also handled low-level waste.

So, we do have disposal sites for low-level wastes in the country.

Mr. YATES. That brings forth a chart.

[The chart follows:]


PRECIPITATION
PROBLEM
CONTAMINATED
WATER
SUPPLIES
LOW-LEVEL NUCLEAR WASTE
RESEARCH TUNNEL
WELL
AQUIFER
RIVER
GROUND WATER FLOW

Infiltrating rain water can dissolve radionuclides from buried radioactive wastes. This leachate can then enter a flowing ground-water system which can transport the nuclides to points of human use (wells and streams). To assess the significance and factors involved in this process, the Geological Survey is collecting data and conducting field research at several low-level waste disposal sites. This information, together with results of laboratory research and computer modeling analysis, is being used to develop better geohydrologic guidelines for selecting and operating low-level waste disposal sites in the future. These guidelines will be useful to Federal and State regulatory agencies responsible for waste management rule-making and licensing activities.

Geological Survey
Chart W-166-81

Mr. ROBERTSON. That is a typical——

Mr. YATES. There is a low-level site. I remember some years ago we had a very serious question about certain low-level nuclear disposal sites which were leaking and leaking into ground water. Well, I guess that is the chart, isn't it?

Mr. ROBERTSON. Yes.

Mr. YATES. I think there was not the research tunnel in between the trenches and the water as you have it there. Whatever happened to those low-level sites?

Mr. COHEN. Three of them are still in operation commercially.

Mr. YATES. Still leaking into the water?

Mr. COHEN. You will recall our previous testimony. We detected some degree of leakage in all but the one in Beatty, Nevada. Leakage was very slow. The diagram you see here, the tunnel depicts research activities in Sheffield. We try to understand the nature and rate of the movement.

Mr. YATES. Do you actually have that kind of research tunnel constructed underneath the trenches?

Mr. COHEN. Exactly, so we can do the type of instrumentation and sampling to study this phenomenon of very slow migration of radionuclides away from the tunnel, from the trenches.

GROUND WATER CONDITIONS AT SHEFFIELD, ILL.

Mr. YATES. Why are you letting it go into the groundwater at Sheffield? Why don't you just stop it?

Mr. COHEN. We are not letting it——

Mr. YATES. That chart indicates it is going down past your research tunnel into the ground water.

Mr. ROBERTSON. Yes, that is true, Mr. Chairman.

Dr. PECK. We are viewing this only in sections.

Mr. COHEN. The facility was not designed by us. The tunnel is an after-the-fact phenomenon to try to study that which was occurring before we came upon the scene.

Mr. YATES. I see. Now, it is no longer occurring?

Mr. ROBERTSON. No, it is still occurring.

Mr. YATES. What happens to the people who drink the water.

Mr. ROBERTSON. There is nobody drinking this water. It is a minor level of contamination, but it is very easily detected.

Mr. YATES. I see, and controlled?

Mr. ROBERTSON. It is not controlled, but it is being watched pretty well. It is in an area that isn't populated, at least it doesn't have drinking water.

Mr. YATES. That indicates the ground water is flowing into a river. I assume somewhere along the line the river is going to be a source of water supply.

Mr. ROBERTSON. That of course is a schematic picture partly.

Mr. DEVINE. It is greatly diluted.

Mr. YATES. It is a very dramatic picture, and very beautifully done may I say. But you know, it still shows the red arrows, it shows nuclear waste going into the river.

Mr. ROBERTSON. This is not happening at Sheffield but has happened at some sites.

Mr. YATES. Is it happening at the places that we talked about before?

Mr. COHEN. I don't believe it is happening at those sites we have studied relating to low-level waste disposal but it is certainly happening at sites where we have other toxic materials that are being buried or have accidently been spilled.

DISPOSAL POLICIES

Mr. YATES. Is there a policy we have with respect to the disposal of low-level wastes? As I remember that testimony, these dumps receive not only low-level waste, they receive some high-level waste too because there was no way of excluding high-level and low-level waste in certain types of disposal units.

Mr. ROBERTSON. Yes, Mr. Chairman, there is a policy. The policy has improved dramatically in the last few years, primarily through NRC regulations and proposed regulations. NRC presently has proposed 10 CFR 61, which will make major changes in low level waste management.

Right now there are no high-level wastes allowed in low-level waste sites, and I think that appears to be well enforced.

Mr. YATES. Is the regulation you describe based upon GS recommendations?

Mr. ROBERTSON. Partly. Earth science parts of it are heavily reflective of GS recommendations. I was closely involved in reviewing the regulations myself.

Mr. YATES. I need no longer have fears of contamination in this country now that we have the recommendations?

Mr. ROBERTSON. There will always be some risk.

Mr. YATES. I see. Well, I guess the attention will have to continue.

DISPOSAL OF MILITARY WASTES

What are you going to do about disposal of military wastes, do you have anything to do with that?

Mr. ROBERTSON. Yes, we do. We are involved in some of the military waste sites, the Idaho facility, for instance.

Mr. YATES. That is large, isn't it? Somebody said it was three football fields, I think.

Mr. ROBERTSON. Right now the high-level military waste is a little more than the commercial reactor waste, but the volume of commercial reactor waste will soon pass the volume of military waste. So, they are comparable amounts, roughly.

TOXIC SPILLS

Mr. YATES. You don't have anything to do with the transportation of or spillage toxic materials, or do you?

Mr. COHEN. We have looked at spillages as part of our overall Federal-State cooperative program.

Mr. YATES. That is an expediency effort, isn't it.

Mr. COHEN. Some of the events we are looking at are intermediate and long-term phenomena. As a matter of fact, we normally do not get involved in instantaneous spills unless we happen to have some particular expertise.

Mr. **Yates**. Are there any questions I should have asked you that I didn't?

Mr. **Cohen**. You asked most of the good ones.

ADEQUACY OF BUDGET REQUEST

Mr. **Yates**. What should we be doing that we are not doing? What should we be expediting in this program, should we be putting more money into this program—accelerating it?

Mr. **Cohen**. We have a request for a substantial increase in the President's 1983 budget.

Mr. **Yates**. Approved by OMB?

Mr. **Pendley**. Yes, and requested by the Secretary, Mr. Chairman.

Mr. **Yates**. We're glad to know that. Is it adequate?

Mr. **Cohen**. I think so, yes. Certainly in terms of the kinds of——

Mr. **Yates**. Is it as much as you asked the Secretary for?

Mr. **Cohen**. Yes.

Mr. **Yates**. He gave you the full amount?

Mr. **Cohen**. Yes.

Mr. **Yates**. OMB went along?

Mr. **Cohen**. Yes, sir.

Dr. **Peck**. It is an increase from somewhat less than $1 million to nearly $4.5 million.

Mr. **Yates**. $3.5 million is a dramatic increase?

Dr. **Peck**. In these perilous times.

Mr. **Robertson**. For us it is.

Dr. **Peck**. For us it is. Not for MMS.

Mr. **Yates**. All right. MMS is the new leader?

Mr. **Pendley**. We like to think so, Mr. Chairman.

Mr. **Yates**. All right.

So, you are being well funded?

Mr. **Cohen**. With regard to this specific issue, yes.

Mr. **Yates**. On this issue. What about other issues?

Mr. **Cohen**. Considering the present budget climate we are being well funded on all issues.

Mr. **Yates**. You mean this budget includes everything you asked the Secretary for?

Mr. **Cohen**. As you are aware, sir, the process is far more complex than my asking the Secretary.

Dr. **Peck**. Although we had the opportunity to brief the Secretary on water problems and the Under Secretary for most of the day one Saturday, and——

Mr. **Yates**. They were very sympathetic?

Dr. **Peck**. They were very interested indeed.

Mr. **Yates**. Well, you are interesting people, but what happened in terms of the money you receive?

Dr. **Peck**. We are also requesting an increase to study the acid rain matter this next year. We have encouragement and support from the Secretary and Under Secretary to help coordinate all the activities in water data gathering and research within the Department of the Interior, so I think there is a growing awareness in the Department of its importance.

Mr. PENDLEY. During the meeting on the budget the Secretary himself plugged back in the increase in the acid rain and increase in the toxic waste study. That was his personal initiative to undertake and add to the monies requested by USGS.

BUDGET REQUEST FOR WATER RESOURCES INVESTIGATIONS

Mr. YATES. Water resources investigations. That is not your program, is it, Mr. Cohen?

Mr. COHEN. Yes, sir.

Mr. YATES. Is it?

Mr. COHEN. Yes, sir.

Mr. YATES. Well, we look at levels of budgets, and we see that in 1983 you requested $124 million. The Secretary gave you $118 million. So, he cut you $6 million. OMB reduced you another $6 million. So, you lost $12 million, right?

Mr. COHEN. Those numbers are—I am reasonably familiar with the numbers, sir.

Mr. YATES. Would you like to see the numbers?

Mr. COHEN. No, I am reasonably familiar with them.

Mr. YATES. The question is: Where did you lose your money, in what programs?

Mr. COHEN. If I may, sir, the net difference between our fiscal year 1983 request and our fiscal year 1982 appropriated budget is plus $5.5 million, which in the present budget climate is——

Mr. YATES. That isn't what I asked you now.

Mr. COHEN. I am sorry.

Mr. YATES. Let's start again.

You asked the Secretary for $124 million. Right?

Mr. COHEN. Again, that is of the magnitude of my recollection.

Mr. YATES. I hand you a document identified as Exhibit A. Take a look at the figures for water resources investigation. What do you see on that line? $124, $118, and $112 million, right?

Mr. COHEN. Yes.

Mr. YATES. What programs did you lose by the $12 million reduction? What did you think was important? I am sure that in this climate you didn't ask the Secretary for any money you didn't consider to be important, did you?

Mr. COHEN. I would have to go back to our records, Mr. Chairman.

Mr. YATES. Do you have somebody here who happens to have the records with him or her? You mean you don't remember $12 million of programs you lost?

Dr. PECK. It is complex, a complex year in budgeting with much ebb and flow, but Mr. Oden——

Mr. YATES. With water I guess there would be ebb and flow.

Mr. ODEN. Thank you.

Mr. YATES. Do you want to help Mr. Cohen, Mr. Oden? I am trying to identify what was lost with the $12 million loss between Mr. Cohen's request and the President's budget. I assume it was your original request, was it not?

Mr. **Cohen**. I participated in the recommendation to the Director.

Mr. **Yates**. Mr. Oden took $12 million away from you. Where did you take $12 million away from him, Mr. Oden?

Mr. **Oden**. I don't have that information with me, but I am sure we can supply our request to the Department.

Mr. **Yates**. I am sure you can too.

Does anyone know the answer? What would you suspect, Mr. Cohen?

Mr. **Cohen**. We do in fact have detailed tracks from step one in the budget process to the present point, but I would have to go back and recapitulate.

Mr. **Yates**. All right, prepare yourself.

Mr. **Pendley**. Yes, sir.

GEOLOGIC AND MINERAL RESOURCE SURVEYS

Mr. **Yates**. Am I going to get the same answers with respect to the entire budget? Nobody knows anything?

Geologic and minerals resource surveys and mapping, started out with a $[illegible] million. The Secretary sent $172 million to OMB, a reduction of $13 million there. Then you lost another $20 million when OMB got through with it, $152 million, right?

Dr. **Peck**. Yes.

Mr. **Yates**. What were the casualties?

Dr. **Peck**. A number of programs were cut——

Mr. **Yates**. That is right.

Dr. **Peck**. ——but the submission to the Committee is a $9 million——

Mr. **Yates**. Can Mr. Gorrell help in all this?

Mr. **Gorrell**. Mr. Chairman, I do not have the details. All I have is what is before you.

Mr. **Yates**. Do we have to send for Mr. Bettenberg?

Dr. **Peck**. On file in our program office are the details——

Mr. **Yates**. That was a very significant cut wasn't it, going from $185 million to $152 million. Conservation of land and minerals lost $5 million.

REDUCTIONS IN MINERALS MANAGEMENT

Even Minerals Management had some reduction.

Mr. **Pendley**. Oh, yes, sir.

Mr. **Yates**. Where were you reduced? You asked for $133 million and the Secretary took $4 million away from you. Why did he do that?

Mr. **Pendley**. As I mentioned in opening remarks, Mr. Chairman, we did cut the coal drilling program that MMS operates by a $3 million figure.

Mr. **Yates**. Then you lost another million dollars from OMB, didn't you?

Mr. **Pendley**. We did achieve some savings in part of our OCS regulatory function by some increased efficiencies, about $1.8 million there.

EARTH SCIENCE APPLICATIONS BUDGET REDUCTIONS

Mr. YATES. Earth sciences applications was cut in half from the original request. Who is in charge of Earth sciences?

Dr. PECK. Mr. Thorley.

Mr. YATES. You lost half the programs you thought were important, didn't you?

Mr. THORLEY. Yes, I did. $2.3 million of that was actually a budget offset with NOAA in the EROS program. But between the 1982 program and 1983 program we did not have a reduction in the environmental affairs office. It stayed the same. The actual reduction occurred in 1982, from 1981 to 1982 we have reduced $2.6 million.

Mr. YATES. Why do you say that? The chart we have indicates you sent a request to the Department of $21 million in fiscal year 1982, and when it came out of the Secretary's office it had been reduced to $11 million.

Mr. THORLEY. The actual reduction of that magnitude occurred in 1982. As the budget drama played out with further reductions in the 1982 budget——

Mr. YATES. I see. Your budget for 1982 wound up at $11 million, and you requested the Department to double it, is that what you are saying? And the Department said, No, back you go to 1982.

Mr. THORLEY. No.

Mr. FREDERICK. The budgets were working simultaneously. There were many actions being taken on the 1982 budget after we had made the initial request on the fiscal year 1983 program; after it had been considered by the Director of the Geological Survey and was in the process of being considered by both the Department and OMB.

Subsequently some of those reductions we weren't able to explain right away happened as part of the 1982 base adjustment based on congressional action. That is what happened in the Earth Sciences programs specifically.

Cuts were taken in the 1982 and subsequently the 1983 base as adjusted.

Mr. YATES. All right. Assuming that is the correct answer, what you are saying is that the request was made for $21 million but all you ever got was $11 million both in 1982 and 1983. I am trying to find out what you considered to be so important that you asked for $21 million, and even though 1982 only had $11 million. There was some reason for asking for another $11 million wasn't there?

Mr. THORLEY. Actually the $21 million was simply level funding from one year to the other. The reduction to $11 million was a reduction in actual appropriations. We considered everything we were doing important, but in that budget climate it was not high enough priority to continue its level funding——

Mr. YATES. What I am trying to find out is: What did you consider to be important that you weren't allowed to request funding for?

Mr. THORLEY. Well, let me take it item-by-item.

Mr. YATES. Okay.

EROS PROGRAM

Mr. **Thorley**. In the case of the EROS program, in 1982 we were reduced by approximately $400,000. We took that reduction in our Departmental program where we put seed money into other agencies to use LANDSAT and other remotely sensed data. We were reduced in 1983 by $2.3 million, but that is a budget offset.

Mr. **Yates**. That is the NOAA item?

Mr. **Thorley**. Yes, sir.

ENVIRONMENTAL AFFAIRS OFFICE

In the case of the Environmental Affairs Office, we took a reduction of $2.6 million from 1981 to 1982, and the reduction principally comes about by the fact that all environmental-type EIS preparations will now be done by reprograming funds.

In the past, the Survey decided that centralization of the funding of the environmental-type actions was the most efficient. The Administration saw fit to reduce the funds so that major Federal actions that require environmental-type statements now have to take available funds and reprogram them. We also assisted the Bureau of Land Management by about $600,000 of effort. Now BLM has to reimburse us. The environmental affairs line item is staying level from 1982 to 1983.

In the case of our land resource data applications line item, there was a $1.5 million reduction from 1981 to 1982.

In that case, we are simply reducing all activities. Not doing workshops; not doing some of our technology transfer-type work.

Mr. **Yates**. Nobody is hurt by the reductions that took place? You are not hurt?

Mr. **Thorley**. It is a matter of priority. Of all of the things the Survey is doing, our outreach activities were not as high a priority.

Dr. **Peck**. In the future, we are going to try to carry out many of these activities as part of specific programs. For example, our earthquake program. We will insist that they carry on some of the outreach activities like preparation of the hazards document for which actually the editor was out of that office. And the same with our water resource programs.

GENERAL ADMINISTRATION

Mr. **Yates**. Thank you. General Administration has an enormous increase, from $3.9 million all the way up to $18.8 million. What is that for?

Dr. **Peck**. It is reformatting, not an actual increase.

Mr. **Yates**. You mean a combination of many administrative expenses, accounts?

Dr. **Peck**. Yes. Much of that was carried previously by an assessment on all funds. It is now combined into GA by direction of the committee, I believe.

Mr. **Yates**. Yes, I remember now. Okay.

Dr. **Peck**. Mr. Grant, Assistant Director for Administration, is here in case there are questions.

DIGITAL CARTOGRAPHY

Mr. **Yates**. What about digital cartography. You are cutting back on that?

Dr. **Peck**. No. That is being recast.

Mr. **Yates**. Mapping, geography and surveys, shows a large reduction.

Dr. **Peck**. It is not a separate item because of pending legislation to make a revolving fund. So, it is actually level funded. It is located elsewhere in the budget. That is a very important program.

Mr. **Yates**. That is what I don't understand. You requested $9.5 million from the Department and wound up with $3.8 in the President's budget.

Mr. **Frederick**. Yes, sir, those figures represent our original request of the Department and ultimate disposition of that request. Again there is no argument about the desirability of the program. There are just judgments in terms of priorities with regard to what we could fund.

Mr. **Yates**. Obviously it is being slowed down, isn't it?

Mr. **Frederick**. Yes, sir.

Dr. **Peck**. Yes.

Mr. **Yates**. What happens as a result of the slowdown? Who is hurt by the slowdown?

Mr. **Frederick**. We aren't able to collect as much data as we would have otherwise.

Mr. **Yates**. What type data?

Mr. **Frederick**. The data we normally show on our topographic maps. Information on elevations, roads, streams, boundaries, and that sort of thing. Those data are used by many components of the Federal Government, State governments and the like.

Mr. **Yates**. So they are going to ask you for information you won't be able to furnish?

Dr. **Peck**. In most cases, we have a topographic map that they can work from. Some applications, it is better to have the data digitized. That will just be delayed. Progress will be somewhat slower.

Mr. **Yates**. Ten years?

Dr. **Peck**. Well, we have a long ways to go. I think we have about seven percent digitized. Mr. Southard——

Mr. **Yates**. On the way toward 100 percent.

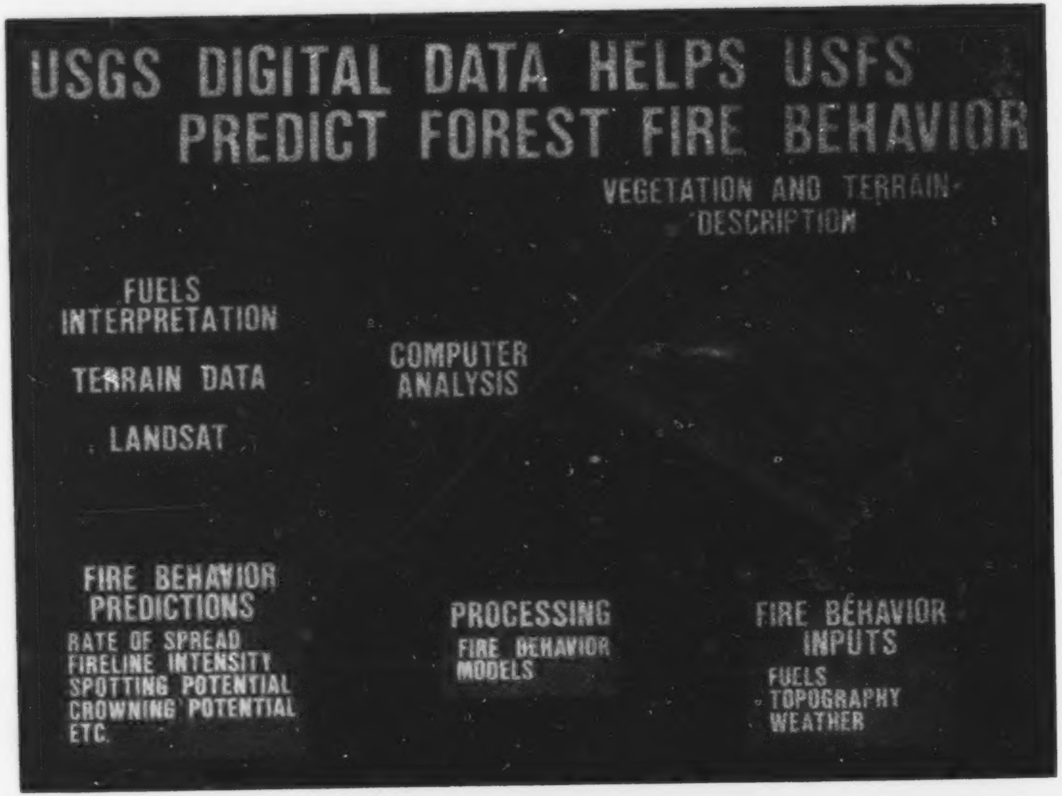
Mr. **Southard**. Yes, sir.

Mr. **Yates**. When are you going to achieve 100 percent?

Mr. **Southard**. Well, at this rate, 15 to 20 years.

Mr. **Yates**. There is another chart on the board.

[The chart follows:]



USGS DIGITAL DATA HELPS USFS PREDICT FOREST FIRE BEHAVIOR

VEGETATION AND TERRAIN DESCRIPTION

FUELS INTERPRETATION

TERRAIN DATA

LANDSAT

COMPUTER ANALYSIS

FIRE BEHAVIOR PREDICTIONS
RATE OF SPREAD
FIRELINE INTENSITY
SPOTTING POTENTIAL
CROWNING POTENTIAL
ETC.

PROCESSING
FIRE BEHAVIOR MODELS

FIRE BEHAVIOR INPUTS
FUELS
TOPOGRAPHY
WEATHER

The Digital Cartography Program provides basic categories of map data in digital form. These data make possible the rapid comparison and evaluation of spatially related data. The graphic emphasizes an effective use of digital data in a natural emergency, a forest fire.

Geological Survey
Chart NMD-98-81

Mr. **Southard**. That is another example, Mr. Chairman, of the ways digital cartography can be used, and has been used, as a matter of fact.

Mr. **Yates**. That data is not very important, is it?

Mr. **Southard**. It is very important.

Mr. **Yates**. Why are you cutting it back?

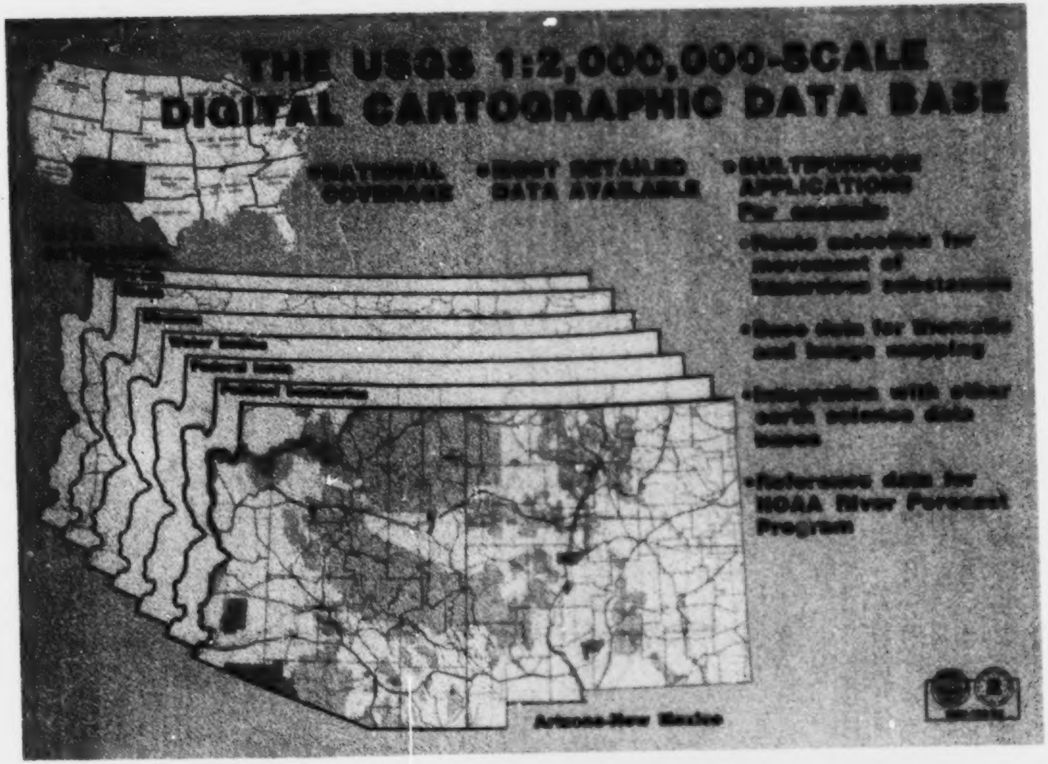
Mr. **Southard**. If that data is not in the data base, then people can't use it to stop a forest fire that has begun to burn already.

Mr. **Yates**. That is one example of how your information is of great importance. What others are there? She has another chart.

Mr. **Southard**. Bless her heart.

[The chart follows:]

Geological Survey
Chart NMD-100-82



THE USGS 1:2,000,000-SCALE DIGITAL CARTOGRAPHIC DATA BASE

- •NATIONAL COVERAGE
- •MOST DETAILED DATA AVAILABLE
- •MULTIPURPOSE APPLICATIONS For example:
  - •Route selection for movement of hazardous substances
  - •Base data for thematic and image mapping
  - •Integration with other earth science data bases
  - •Reference data for NOAA River Forecast Program

Under the Small Scale and Other Special Mapping Program a variety of multipurpose base maps and special map products are prepared for Congressional, Federal, and State needs. The exhibit shows a portion of the 1:2,000,000-scale data base produced from the National Atlas sectional maps. This is the most detailed cartographic data base in digital format available for the entire United States.

This is another example of a digital cartographic data base that has been completed and will be available to users later this year.

Mr. YATES. Is complete?

Mr. SOUTHARD. The 1:2,000,000 digital cartographic data base is complete.

Mr. YATES. This won't be hurt by the cutback?

Mr. SOUTHARD. It will not be hurt by the cutback. A very important aspect, Mr. Chairman, of the digital cartography program, the slower we put the data in the data base, the slower we get funds back from those who are paying for it, because there is a strange feeling that this should be a self-sustaining program.

SELF-SUSTAINING PROGRAM

Mr. YATES. Is this self-sustaining?

Dr. PECK. We hope in time it will be self-sustaining.

Mr. YATES. How much do you receive back? You don't get 100 percent?

Dr. PECK. It is a very small——

Mr. SOUTHARD. It is aimed at ultimately being 100 percent self-sustaining. We had aimed, in our original proposal, at that occurring in 1987. With this slowdown, we assume that will be delayed another two to three years if the slowdown continues that long.

Mr. YATES. Should the committee give you the money that you asked for originally? Should we put the extra $6 million in the budget?

Mr. SOUTHARD. If the committee sees wisdom in going ahead with this program, we will do the best we can to use it well.

Mr. YATES. You better give the committee reasons for doing it. Okay, I like your first reason, which is to help the Forest Service with forest fires. If you are through with railroads and roads; streams and water bodies; Federal lands and political boundaries, what are you not through with?

USES OF DIGITAL DATA

Mr. SOUTHARD. We have completed the 1:2,000,000-scale data base, Mr. Chairman. This is a small-scale data base which is a digitization of those maps that were in the National Atlas. It aims at a different set of users. It aims at a different set of user requirements.

This data base is available and for sale immediately and for use by people. We are starting to get usage of this data base.

The Forest Service related data is at 1:24,000-scale and has only been completed for certain categories of information in experimental forest areas.

Mr. YATES. What else are you working on other than the Forest Service, which will have to be delayed?

Mr. SOUTHARD. The list of users is as long as the list of Federal agencies, Mr. Chairman. Soil Conservation Service needs these data. They are very interested.

Mr. YATES. To do what?

Mr. SOUTHARD. In digitizing land net for several of their primary interest areas. And they are willing to have that land net data now. We are digitizing it for them and making it available to them, though somewhat slowly.

Mr. **Yates**. All right.

Mr. **Southard**. Land net is one of the categories at the 24,000 scale that is used by all the land management agencies, Bureau of Land Management, Forest Service, Fish and Wildlife Service, Bureau of Indian Affairs. All of them are interested in the land net. Two-thirds of the United States is covered by the General Land Office and Public Land Surveys.

Mr. **Yates**. What do you mean by land net? What is the nature of the use of the information?

Mr. **Southard**. Range and township surveys that were done and that cover two-thirds of the United States.

Mr. **Yates**. This makes those surveys more accurate?

Mr. **Southard**. This provides for making it available to them in machine readable format, for digital processing in connection with other data sets. Within the Geological Survey is several. The National Coal——

RELATIVE IMPORTANCE OF DIGITAL CARTOGRAPHY

Mr. **Yates**. How important is digital topography in terms of the entire operation of GS? You have many needs, many financial needs.

Dr. **Peck**. It is one of many programs.

Mr. **Yates**. I know that. But how important is it by comparison to your other programs? If you had your druthers and you were asking the committee to restore some funding, where would this be on a scale of one to ten?

Dr. **Peck**. If it means reducing another of our——

Mr. **Yates**. I am not talking about reducing. That is the attitude the Secretary takes. The committee is looking at the needs of the country.

Dr. **Peck**. Yes.

Mr. **Yates**. GS provides a number of services, some that are more important than others. Which do you consider to be your important services, that you need more money for? Is this one of them?

Obviously, Mr. Southard thinks it is important, and he may be right. I think it is important for the Forest Service because we have to pay enormous sums of money for firefighting.

Dr. **Peck**. I think it is one of our most important programs, with a lot of tremendously exciting missions in the future. I am not seeking an increase in funding.

Mr. **Yates**. Obviously you are not. You would be clubbed if you did.

Dr. **Peck**. It would be my neck.

Mr. **Yates**. That is right.

Mr. **Frederick**. Mr. Chairman, to comment on the first chart, that is a good illustration for application of this data and there are many others in making land-use decisions. We are paying particular attention with the funding we get for this program, to the Forest Service requirements, to the Bureau of Land Management requirements, and to other specific Federal agency requirements.

Priority will be given to those with the most immediate and highest payoff. We think we can do a reasonable job with the funds we have requested in terms of meeting immediate requirements as well as getting the data base started.

Dr. **Peck**. We have also been encouraged by the Secretary, working through him, to approach the other agencies with need to make sure that there is not a duplication of effort. The idea that some——

Mr. **Yates**. What other agencies do this?

Mr. **Frederick**. No other agencies, except the Defense Mapping Agency for Defense, do that specifically as a service. Some of the other agencies have collected the information initially for their own particular use. When they do that, it is formatted for their own application and isn't generally accessible nor available to other users. We are trying to pull that together.

DIGITAL CARTOGRAPHY FUND ACT OF 1981

Mr. **Yates**. Well, in your report you say the Digital Cartography Fund Act of 1981 would represent a significant policy change. Was it enacted or was it not?

Mr. **Frederick**. No, it was not, sir.

Dr. **Peck**. No.

Mr. **Frederick**. It is now being considered in the Senate.

Mr. **Yates**. That would establish a fund for you, wouldn't it? A revolving fund?

Mr. **Southard**. Yes. Mr. Chairman, that——

COMMITTEE NEED FOR INFORMATION

Mr. **Yates**. How is the committee going to get any information so that it can act, if all you tell us is that the funds that you have, that you have presented to us will take care of all the needs of the GS, and that the country doesn't need any speeding up of programs beyond which you have requested funds? Are we to assume that that is correct?

Dr. **Peck**. I think it is our role and responsibility to lay out the implications as fully as you desire.

Mr. **Yates**. All right. That is why I am trying to get this information from you. You asked the Department for $572 million for all your appropriations, exclusive of pay cost requests. The Secretary sends to OMB a request for an amount of money that is $35 million less, and OMB cuts out an additional $17 million. So you are cut $52 million from the amount you originally requested of the Secretary?

Dr. **Peck**. From the request in January.

Mr. **Yates**. $52 million is a rather significant amount, isn't it?

Dr. **Peck**. I think by and large, Mr. Chairman, a good deal of thought went into distributing those cuts. In some cases I think the cuts have been taken up by requesting industry to assume responsibilities.

Mr. **Yates**. Such as?

COAL DRILLING

Dr. **Peck**. Coal drilling in connection with the leasing of Federal lands.

Mr. **Yates**. What do you mean by that, coal drilling?

Dr. **Peck**. That instead of us doing the drilling, closely spaced drilling related to tract delineation, we are arranging it so that industry, if it is interested in doing the leasing, will do the drilling itself.

Mr. **Pendley**. Precisely correct, Mr. Chairman. One of the congressional initiatives in 1976 was passage of the Coal Leasing Amendments Act which provided for exploration licenses on the public lands where that drilling would take place by the private sector and data be made available. We will utilize that data rather than go out and create a redundancy on the public land. We will have the data and make use of that data for the leasing program. That is one of the savings.

Mr. **Yates**. How much are you saving with that?

Mr. **Pendley**. $3 million.

Dr. **Peck**. Another change affecting both of our organizations——

Mr. **Yates**. What do you lose by letting industry do that? Do you lose the knowledge of how good the seams of coal are or something?

Mr. **Pendley**. Not at all, Mr. Chairman. They will turn over to us the drill data, core data, the same type of data we use to regulate oil and gas activities upon the public land with regard to drainage activities and so forth. We have that same information.

Mr. **Yates**. Are you going to do any verification of industry drilling?

Dr. **Peck**. We are placing more emphasis on the coal exploration program in the Geological Survey in the Geologic Division. We are seeking an increase in that program to do more regional coal studies and widely spaced drilling to have publicly available data and data well in advance of leasing that we can provide the Bureau of Land Management for its planning process and also to have our own handle on what the coal resources are.

EXPLANATION OF PROGRAM REDUCTIONS

Mr. **Yates**. Somewhere along the line I want to find out what makes up the $50 million you lost? You have lost $3 million in the coal drilling program for work you no longer have to do. But you couldn't tell me off the top of your head what the whole $50 million is?

Dr. **Peck**. No, but we can certainly provide that for the record.

[The information follows:]

U. S. GEOLOGICAL SURVEY
FY 1983 Budget Request History
(Dollars in Thousands)

Activity/Subactivity/Program Element	FY 1982 Approp.	FY 1983 Request to Depart.	FY 1983 Request To OMB	FY 1983 Request To Congress
Surveys, Investigations, and Research				
National Mapping, Geography and Surveys	76,347	75,495	70,989[a]	70,448
Primary Quadrangle Mapping	37,488	39,050	36,925	36,865
Primary Quadrangle Mapping	33,512	34,908	32,783	33,011
Modernization of Mapping Technology	3,976	4,142	4,142	3,854
Map Revision and Orthophotoquads	16,030	16,698	16,832	16,761
Revision	9,841	10,251	10,337	10,657
Orthophotoquads	6,189	6,447	6,495	6,104
Digital Mapping	3,873	--	--	--
Small, Intermediate, and Special Mapping	15,200	15,834	13,233	13,016
Intermediate - Scale Mapping	6,682	6,960	7,017	6,653
Land Use and Land Cover Mapping	3,443	3,587	1,910	2,201
Airborne Profiling of Terrain System	2,592	2,700	1,700	1,689
Small Scale and Other Special Mapping	2,483	2,587	2,606	2,473
Cartographic and Geographic Information	3,756	3,913	3,999	3,806
Geologic and Mineral Resource Surveys and Mapping	161,496	185,524	172,795	152,821
Geologic Hazards Surveys	48,008	56,008	53,469	43,455
Earthquake Hazards Reduction	32,652	37,013	34,335	30,843
Volcano Hazards	9,578	12,977	13,006	6,830
Ground Failure & Construction Hazards	2,741	2,855	2,890	2,718
Reactor Hazards Research	3,037	3,163	3,238	3,064
Land Resource Surveys	16,204	20,978	18,306	16,735
Geologic Framework	13,086	17,731	15,015	13,639
Geomagnetism	2,114	2,202	2,235	2,104
Climate Change	1,004	1,045	1,056	992

Activity/Subactivity/Program Element	FY 1982 Approp.	FY 1983 Request to Depart.	FY 1983 Request To OMB	FY 1983 Request To Congress
Mineral Resource Surveys	38,749	45,364	46,195	40,860
Alaska Mineral Surveys	8,829	9,197	9,296	9,218
Conterminous U.S. Mineral Surveys	5,036	8,245	8,354	5,545
Wilderness Mineral Surveys	8,517	8,872	8,952	8,400
Strategic/Critical Minerals	4,478	6,665	6,939	5,727
Development of Assessment Techniques	11,785	12,276	12,544	11,867
Mineral Discovery Loan Program	104	109	110	103
Energy Geologic Surveys	37,582	41,348	32,726	29,982
Coal Investigations	12,709	16,439	15,437	14,108
Onshore Oil and Gas Investigations	6,921	7,209	7,311	6,889
Oil Shale Investigations	2,279	2,374	-801	813
Geothermal Investigations	7,939	8,270	6,079	6,053
Uranium/Thorium Investigations	6,774	7,056	2,098	2,119
World Energy Resource Assessment	960	--	1,000	--
Offshore Geologic Surveys	20,953	21,826	22,099	21,789
Offshore Oil and Gas Resources	11,165	11,630	11,793	11,774
Energy-Related Environ. Invest.	8,356	8,705	8,784	8,576
Marine Geology Investigations	1,432	1,491	1,522	1,439
Water Resources Investigations	106,859	124,292	118,494	112,015
National Water Data System-Federal Program	47,298	56,407	57,063	53,006
Data Collection and Analysis	14,585	15,802	16,169	15,776
National Water Data Exchange	1,236	1,288	1,319	1,239
Regional Aquifer Systems Analyses	14,624	15,233	15,590	14,585
Coord. of Nat'l Water Data Activities	883	920	942	890
Core Program Hydrologic Research	5,896	6,141	6,278	5,950
Improved Instrumentation	1,912	1,991	2,038	1,892
Ground Water Recharge	--	1,430	1,464	--
Subsurface Waste Storage	1,437	1,497	1,532	1,446

Activity/Subactivity/Program Element	FY 1982 Approp.	FY 1983 Request to Depart.	FY 1983 Request To OMB	FY 1983 Request To Congress
Flood Hazards Analysis	452	471	482	462
Water Resource Assessment	332	1,946	362	330
Supporting Services	3,539	3,686	3,772	3,572
Toxic Wastes - Ground Wtr Contamination	942	4,481	4,586	4,416
Acid Rain	1,460	1,521	2,529	2,448
Federal/State Coop Program	44,220	48,454	46,457	44,164
Data Collected & Analysis, Areal Appraisals & Special Studies	37,863	41,832	39,770	37,929
Water Use (Coop)	3,275	3,411	3,476	3,182
Coal Hydrology (Coop)	3,082	3,211	3,211	3,053
Energy Hydrology	15,341	19,431	14,974	14,845
Coal Hydrology	7,474	9,736	6,586	6,949
Nuclear Energy Hydrology	6,594	6,869	7,030	6,595
Oil Shale Hydrology	1,273	2,826	1,358	1,301
Conservation of Lands and Minerals	122,285	133,321	129,806	128,502
Outer Continental Shelf Lands	65,159	68,573	68,873	66,684
Regulatory Programs	32,886	32,334	32,422	31,409
Resource Evaluation Program	32,273	36,239	36,451	35,275
Federal and Indian Lands	41,603	45,578	39,663	39,924
Oil and Gas Program	22,547	25,078	23,078	23,594
Coal Program**	12,702	13,481	8,981	9,579
Other Energy Minerals Program	3,644	4,048	4,300	3,798
Non-Energy Minerals Program	2,134	2,371	2,574	2,273
Water power Program	576	600	730	680
Royalty Management	15,523	19,170	21,270	21,894
Earth Sciences Applications	14,175	21,052	11,204	11,550
Earth Resources Observation Systems	11,904	12,400	9,280	9,490
Environmental Affairs	1,438	4,051	1,314	1,425
Land Resources Data Applications	833	4,601	610	635

Activity/Subactivity/Program Element	FY 1982 Approp.	FY 1983 Request to Depart.	FY 1983 Request To OMB	FY 1983 Request To Congress
General Administration	3,309	3,917	4,171	18,834[e/]
Executive Direction	2,427	3,035	3,035	6,200
Administration Operations	--	--	--	11,287
Employee Compensation	882	882	1,136	1,347
Facilities	10,074	11,925	15,925	13,407
National Center - SLUC	8,467	8,467	12,467	11,784
National Center - Facilities Mgmt	1,607	3,458	3,458	1,623
TOTAL, SIR	494,545	555,526[b/]	523,384[c/]	507,577[d/]
National Petroleum Reserve in Alaska				
Barrow Area Gas Operation, Exploration and Development	2,196	6,960	6,400	--
Operation and Maintenance	2,196	6,960	6,400	--
Barrow Area Gas Operation, Exploration and Development	--	--	--	6,400
Digital Cartography	--	9,534	6,059	3,873
TOTAL, USGS	496,741	572,020	535,843	517,850

[a/] Digital Cartography which was included in National Mapping, Geography and Surveys in the FY 1983 request to OMB has been pulled out for comparability purposes.

[b/] FY 1982 level (President's March Budget) at time of FY 1983 request to Department (May 1981):

SIR	$529,527
Digital	6,034

[c/] FY 1982 level (Conference action) at time of FY 1983 request to OMB (September 1981):

SIR	$515,151
Digital	($4,034)

[d/] FY 1982 level (Appropriated) at time of FY 1983 request to Congress:

SIR	$494,545
Digital	($3,873)

[e/] Reflects revised presentation of General Administration line item which was previously funded largely through direct assessment on programs.

3/31/82

Mr. YATES. I would like to know the important uses of your digital information in addition to aiding in forest fire fighting. That I think is very important, but I want to know what the other important aspects are.

Mr. SOUTHARD. All right.

Mr. YATES. All right. Do you want to do that now, or do you want to put it in the record

Mr. SOUTHARD. I could do it better in the record.

[The information follows:]

Digital Cartography Program

The main goal of the Geological Survey's Digital Cartography Program is to meet national digital cartographic user needs through the collection, preparation and distribution of fundamental cartographic data in digital form. To meet this objective, the Survey is building a National Digital Cartographic Data Base which will contain the basic categories of map data in standard formats and accuracies.

The fundamental data that serve as the basis for integration of resource information systems are found on Geological Survey topographic maps. The objective is to provide the following basic categories of data in standard formats and codes that will enable other agencies to incorporate their data:

1. Transportation systems--Roads, railroads, trails, canals, pipelines, transmission lines, bridges, tunnels.

2. Hydrography--Streams and rivers, lakes and ponds, wetlands, reservoirs, and shorelines.

3. Public Land Net--i.e., section, range, and township lines.

4. Boundaries--Political jurisdictions, national parks and forests, military reservations.

5. Hypsography--Contours, slopes, and elevations.

The files for the base categories are grouped into two basic forms. The first of these, called a digital line graph (DLG), is linear map information, such as transportation, hydrography, land net, and boundaries, in digital form. The second, called a digital elevation model (DEM), consists of a sampled array of elevations for a number of ground positions that are usually, but not always, at regularly spaced intervals.

The following are examples of user agencies' application of U.S. Geological Survey digital cartographic data:

> The Geologic Division and Minerals Management Service's National Coal Resource Data System requires digital elevation models, boundaries, and land net with strike and dip information to compute overburden and evaluate the economic feasibility of developing known coal resources.
>
> Soil Conservation Service is using a digital land net base to map their primary sample units for resource management.
>
> Forest Service is using digital cartographic data for timber management activities, and to analyze scenic and recreational alternatives. Also, they have a computer-based program designed to predict the course of forest fires.

National Park Service is using digital cartographic data in a computerized system for park planning and to monitor and evaluate air quality.

TVA is using digital elevation data in computer-based models to assess the probable air pollution levels associated with alternative operating strategies for coal fired electrical generating plants.

Bureau of Reclamation is using land net information in digital form to orient their water project maps, resource management maps and their land use data.

Census plans to use automated techniques to provide the necessary geographic support services for the 1990 Census.

Fish and Wildlife Service is using digital cartographic data for wildlife management (including habitat analysis), predator control, hunting, and air pollution problems.

Bureau of Land Management is using digital cartographic data as a reference to assess management alternatives for grazing and timber management areas within the public lands and also as a base for a land records information system.

MIT is working with the U.S. Air Force in testing the Cruise Missile. They are currently using DMA digital terrian tapes, but hope to achieve greater accuracy from USGS 7.5-minute DEM's.

The North Dakota Public Service Commission needs land net and boundary data for a statewide project to produce base maps showing 36 categories of avoidance features. The maps will be used to evaluate such proposals as plant site location and transmission-line routing.

Washington Department of Natural Resources needs digital land net data to assist county tax assessments.

Mr. **Yates**. Do it for the record then.

INCREASED CONTRACTUAL SERVICES

Now, you have a reduction of 416 full-time equivalents, and you have reductions in personnel compensation and benefits of $11.5 million. Kind of interestingly, you increase contractual services by $7.6 million. $1.3 million in supplies and $1.3 million in equipment. Why do you increase contractual services, by so much when you cut back in the other? Is it because you are going to have to use contract services, in view of the reduction in personnel compensation and benefits, to do the things your employees used to do?

Dr. **Peck**. That may indeed be the answer, or it may be an artifact of the construction of the budget. I am not sure. Mr. Oden, can you respond to that?

Mr. **Oden**. In some program areas there was a reduction overall in people, with the same money in that program element. Therefore, we would need to increase the contractual dollars.

Mr. **Yates**. Why are you firing the people?

Dr. **Peck**. We are not planning to fire them.

Mr. **Yates**. You are getting rid of them, aren't you? Maybe I misunderstood you. You are not rehiring.

Dr. **Peck**. Attrition.

Mr. **Frederick**. That is right, sir.

Mr. **Yates**. I should have put it another way. Is it better to have people on board or to do the work through by contractual services?

Dr. **Peck**. I think it varies from area to——

Mr. **Yates**. No, in this area.

Dr. **Peck**. For example we have been, again—contracting the photolab services in the Mapping Division in Denver, and I think it has worked out——

Mr. **Southard**. Extremely successfully.

Dr. **Peck**. Extremely well. And the Souix Falls facility under the EROS program.

Mr. **Yates**. If that is true, do you intend to attrit more people and use more contract services?

Dr. **Peck**. But in other areas, Mr. Chairman, there is a real strength in having in-house capability in our own staff upon which we can build new programs. A balance of the two modes is——

Mr. **Frederick**. Mr. Chairman, we are in the process of making adjustments between those programs. Programs that require people in-house to enhance our technical expertise. In those areas where we can possibly contract, perhaps computer operations, or that sort of thing.

Dr. **Peck**. Also there are other areas. The earthquake program is a very good example where we quite purposefully contract, through research grants and contracts, about a third of the program in order to draw on the very real capability of university scientists in a difficult area.

TRAVEL

Mr. **Yates**. All right. $752,000 in travel and transportation of persons is proposed. Will this be applied to headquarters and regional office staff, or to the field programs?

Dr. **Peck**. I think we need a page reference. Page 25?

Mr. **Oden**. That would be a reduction in both field and headquarters travel.

Mr. **Yates**. More for one, or the other?

Mr. **Frederick**. More for administrative-type travel, Mr. Chairman, than field travel. We are trying to protect field travel operations as much as we possibly can.

QUADRANGLE MAPPING

Mr. **Yates**. You are cutting back on quadrangle mapping. What are the national priorities that determine where your mapping will occur?

Dr. **Peck**. That is established by an established system, OMB Circular A-16, where we routinely and periodically get from other Federal agencies and from States and the different divisions in the USGS what their priorities are. We balance those priorities in a systematic way. We are, as you know, increasing the funds and effort for quadrangle revision. We are moving to these provisional mappings so that we can complete the mapping of the Nation, even though that primary quadrangle mapping area is cut.

Mr. **Frederick**. Mr. Chairman, if I may.

Mr. **Yates**. Yes.

PROVISIONAL MAPS

Mr. **Frederick**. You asked a question earlier in terms of why didn't we think of that earlier on, that is provisional mapping. We really wouldn't want to leave the record perhaps unclarified on one point. Provisional maps aren't as good and aren't as complete as the principal maps that we do. We went to the provisional maps for two particular reasons. One is with the limited budget available to us we were concerned about the users and concerned about getting an adequate product for immediate use. Also, we think with the digital cartographic program we are developing we will be able to complete those maps as they are being revised, so we have kind of a two-pronged approach to deal with that. It is better to have it than not, so that is the reason we have decided to produce the provisional maps.

Mr. **Yates**. Would you place in the record the high priority projects, mapping projects that will proceed even though your mapping of the western lands may be reduced?

Dr. **Peck**. Yes, sir.

[The information follows:]

FISCAL YEAR 1983 PRIMARY QUADRANGLE MAPPING

There are currently over 400 mapping projects covering over 350,000 square miles in progress in the primary quadrangle mapping program. It takes several years for a project to be completed, starting with acquisition of aerial photography and ending with the final finishing and printing of the maps. In fiscal year 1982, as the about 63,000 square miles (1,100 quadrangles) of new mapping are produced, a like amount of new project areas are being introduced into the mapping program so that work flows without interruption through all phases of map production. In fiscal year 1983, it will be necessary to cut back in all phases of primary quadrangle map production to maintain program balance.

The high priority projects that will proceed even through overall mapping production is reduced are: Energy areas of known and potential sources of coal, oil and oil shale; mineral resource areas; coastal areas along the Atlantic and Pacific coasts and the Great Lakes; volcano hazards areas of the cascades including Mt. St. Helens; National Forest areas for the management of timber resources; water resource areas of the West including dams, reservoirs, lakes, streams and watersheds; Indian Reservations for the management of Indian lands.

MAP REVISION

Mr. YATES. What happens now that you have determined western lands don't have the priority you said they had last year?

Mr. FREDERICK. I think it is a judgment in terms of how far one can go——

Mr. YATES. With how much money one has.

Mr. FREDERICK. With the dollars that are available.

Mr. YATES. Right. Why is it more important to revise existing maps than to provide maps of previously unmapped areas?

Dr. PECK. Many of these are in urban areas where there are many map users. Many of them haven't been updated for 30, or 40, or even 50 years in which time there has been urbanization, new roads and those sorts of things.

Mr. SOUTHARD. Two things to add to that, Mr. Chairman.

In many cases, we have photo-revised maps over and over, which does not change the basic geometry of what may be a fairly old map. There are no maps that haven't been revised at all for 30 or 40 years, but there are some maps that haven't been changed in their basic geometry. Those require complete revision lest the vast investment we have made in good mapping already is not to be wasted.

So, we need it in areas of development, and where those developments acutely need the kind of map we make. We badly need to put new data and new maps into the process. And those maps are expensive.

Mr. FREDERICK. It is not an absolute statement. We wouldn't say it is more important to revise a map than it is to produce a new map. It is one of relative priorities again in terms of relative program size. We chose to make some movement in the direction of revision because we thought it was important——

Mr. YATES. The committee will recess while I go vote.

[Brief recess for vote.]

Mr. YATES. Will the number of revisions with respect to the quads increase by 20, from 40 to 60?

Dr. PECK. They increase from 40 to 60.

Mr. YATES. Why is the number expected to be below the number produced in fiscal year 1981?

Dr. PECK. Mr. Southard.

Mr. SOUTHARD. I am sorry, I didn't get the question, Mr. Chairman.

Mr. YATES. Why is the number of revisions expected to be below a number produced in fiscal year 1981? Why is it lower than it was a couple years ago?

Mr. **Southard**. Because we are putting in more of the expensive revisions, Mr. Chairman. The larger number that you have been used to seeing us use in our annual reports have been the simpler, less expensive revisions. We are now consciously trying to put in some of those redos of old maps that have a bad base.

LAND-USE LAND-COVER MAPS

Mr. **Yates**. I see. You are being cut by $1.2 million on your mapping for land use—you are going to complete the inventory on western lands. Reductions will occur in the primary quad mapping in western areas, are they not? According to page 47 of the justifications.

Mr. **Southard**. That is all land-use land-cover maps in that area, not primary quadrangle maps, Mr. Chairman.

Mr. **Yates**. Are they not related?

Mr. **Southard**. No.

Dr. **Peck**. The primary quad program, standard topographic maps like the one on the exhibit there.

Mr. **Southard**. Primary quadrangle maps are usually 1 to 24,000- or 1 to 25,000-scale.

Dr. **Peck**. The land-use land-cover maps show different types of vegetation and farmland and that sort of thing at a scale of 1 to 250,000.

Mr. **Yates**. Can you put in the record the 13 States where mapping has been completed through the joint funding, and the other 3 participating States as well.

Mr. **Southard**. Yes, we will, Mr. Chairman.

[The information follows:]

Joint Funding Agreements for Land Use and Land Cover Mapping

The land use and land cover mapping program is a program supported by 16 States through a joint funding agreement. Mapping has been completed in 13 States through such joint funding agreements:

Alabama, Arkansas, Florida, Hawaii, Illinois, Kansas, Kentucky, Louisiana, Missouri, North Carolina, Pennsylvania, South Carolina, and West Virginia.

In addition to the 13 States listed above, land use and land cover mapping is supported by joint funding agreements in Alaska, California, and Georgia.

Mr. **Yates**. For how long a period will the production system be deferred?

Mr. **Southard**. For land-use land-cover?

Mr. **Yates**. Yes.

Mr. **Southard**. At a reduction like that, it will be deferred 6 to 7 years for the total completion of the lower 48 States.

Mr. **Yates**. What if you have a similar reduction next year, will that delay it another couple years?

Mr. **Southard**. My answer was based on this reduction staying in force.

Mr. **Yates**. Staying on that level?

Mr. **Southard**. Yes.

Dr. **Peck**. One factor that may intervene, there is a lot of interest by the State of Alaska in a cooperative program using a more detailed sort of land-use land-cover.

Mr. **Yates**. How will that affect it?

Mr. **Southard.** It will do very well for Alaska, Mr. Chairman. And we are expecting that Alaska, and our ability to cooperate with them, will do the Alaska land use mapping program on a faster turnaround than we expected was possible.

AIRBORNE PROFILING TERRAIN SYSTEM APTS

Mr. **Yates.** What is the value of the APTS program?

Mr. **Southard.** The APTS program will give us a further iteration of a very precise airborne surveying capability, which is a further development of the art of being able to identify places on the ground, in all three dimensions to near geodesic accuracies in airborne mode.

Mr. **Yates.** Has the value of this program been diminished?

Mr. **Southard.** No, sir.

Dr. **Peck.** No, but it is in a reasonable period for a pause. We have developed a prototype instrument, it is about developed. It is time now to test it out throughly. I think it is just wise to go through that testing before we get another system.

Mr. **Yates.** Is it wise to wait so long that you reduce the base of $2.5 million?

Dr. **Peck.** The funds we have for this year, $1.7 million we are requesting, is enough to carry out that final development and testing installation in the airplane.

Mr. **Southard.** We think we can do what needs to be done with it. It is very close to being on the line. If it were to be reduced any further, we would be truncated somewhat in our efficiency.

SIDE LOOKING AIRBORNE RADAR (SLAR)

Mr. **Yates.** What is the status of compliance with the 1982 recommendation of the conferees on side looking airborne radar?

Dr. **Peck.** Yes, we are——

Mr. **Frederick.** Mr. Chairman, we are in the process. We have gone through the analysis of the requirements for the data and finalized a plan based on input from the States, other Federal agencies and others who have specific input. We will probably have a request on the street Monday for proposal for SLAR coverage or radar coverage specifically.

Mr. **Yates.** What is your feeling, should this program be continued with appropriated funds or should industry pay for it?

Dr. **Peck.** This is a program for which there is fair demand by industry for the products, particularly in the Appalachian area because of its utility for determining features that may affect coal mining, or may increase fracture porosity for gas production.

On the other hand, the service is available commercially from private industry.

Mr. **Yates.** How much demand is there for the data?

Dr. **Peck.** As far as selling data, Dr. Salisbury is in charge of the program——

Mr. **Yates.** Doctor, how much demand is there for the SLAR data?

Dr. **Salisbury.** Well, we don't have access to the records of the sales of proprietary data so that we can't answer that in general terms for data available over much of the United States.

Mr. YATES. Do you have any data in your files now?

Dr. SALISBURY. We do have an answer in terms of our data. We have not had much request for the data in Alaska. We have had four data sales so far.

Mr. YATES. Is there any reason why demand isn't greater?

Dr. SALISBURY. One can rationalize it by saying that the contractor, when he flew the area that we requested, flew even larger areas on speculation, and offers all of that to the private sector on a confidential basis. It may be that some of the potential buyers would rather go to the contractor than to us, but we just don't know.

Mr. YATES. What is the feeling of the Survey? Should $6 million be added to the budget for SLAR acquisition of data for the Appalachian Mountains?

Dr. PECK. In constrained times, and considering the overall national deficit, considering that imagery is available from private industry, I would say no.

Mr. YATES. Well, in your report you say, "Our analysis of the utility of SLAR data indicates these data have marginal value for major geologic and cartographic mapping programs." Your answer is in keeping with that.

Dr. PECK. I think there are two aspects of the utility of the data. One is for our own internal programs. That depends on the area to be studied and the problem to be solved. So, there is an internal use. Then there is also the external use like the use of our topographic maps or water data. That is the oil and the mining companies. Indeed, I think they find the maps or the imagery have quite a bit of utility for their specific problems in the Appalachians with heavy soil cover and rather subtle geology.

SATELLITE IMAGERY VS. SLAR

Mr. YATES. Now, in your justification, you talk about the use of satellite imagery in preparation of a geologic map of Cape Cod. What is the cost of that as compared to a synthetic aperture radar program?

Dr. PECK. I think the cost is a good deal less. Is that you, Jack?

Dr. SALISBURY. I am at a loss to give the cost. If you are talking about acquisition, as well as reproduction cost, that is something I would have to look up.

Mr. THORLEY. First the data is available from Landsat at a cost of $15 to $45 for the Cape Cod image. Data is not available from SLAR. The current estimate to acquire SLAR imagery of the same approximate area would be in the neighborhood of $200,000.

Mr. YATES. What is the comparison in the quality?

Mr. THORLEY. Entirely different systems. We are using the RBV for planimetric mapping with resolution in the neighborhood of 30 meters. The RBV is a vertical type expression. SLAR data, as you know, is taken from the side and tends to enhance the visual impression of the topography through shadow enhancement, two entirely different products.

Dr. PECK. Resolution is better?

Mr. THORLEY. SLAR can be as high as ten meters. I would say for the purposes for which the Cape Cod map is being used the Cape

Cod RBV image is much more useful because it is being used as a map in terms of road and land-use patterns on the ground.

Radar tends to gray out agricultural patterns.

MOUNT MCKINLEY

Mr. **Yates**. Are you having trouble on your maps determining whether the mountain should be called Mt. McKinley or Mt. Denali? What are you calling it, Mr. Southard?

Mr. **Southard**. We are still calling it Mt. McKinley because that is still the official name agreed on by the Board on Geographic Names. Public hearings have been held. There is a strong difference of opinion that Denali should be the right name for the feature which was the original Alaskan Native name for it. That decision still rests—if it is to be changed, it will be changed by the Secretary of the Interior on the basis of further evidence. Further evidence as yet is not forthcoming.

Mr. **Yates**. Evidence of what?

Mr. **Southard**. Currently it is still Mt. McKinley on all the official documents.

Mr. **Yates**. Well, there is a limitation in our bill, isn't there?

Mr. **Frederick**. Yes, sir.

Mr. **Yates**. If the limitation is removed what will happen?

Mr. **Frederick**. There is still the analysis required, Mr. Chairman, and ultimately the Secretary of the Interior will have to make a decision on that based on the recommendations of the Board on Geographic Names.

Mr. **Yates**. I suspect Mr. Regula would want to say something about that.

Mr. **Frederick**. That isn't likely to happen I don't believe in the next few days.

Mr. **Southard**. No, it isn't, over the next few days.

EARTHQUAKE AND VOLCANO REDUCTIONS

Mr. **Yates**. Why is the Survey reducing work on the two programs areas that have the highest potential for catastrophic destruction of property and life?

Mr. **Frederick**. You are talking about earthquakes and volcanoes, are you not?

Mr. **Yates**. Yes.

Dr. **Peck**. Well, that reduction reflects the Administration's priorities in a constrained year, balancing resource programs.

Mr. **Yates**. Does that mean the Administration doesn't have respect for the program's value in preventing catastrophic destruction of property?

Dr. **Peck**. I think, no; I do not think that is true. I think it is partly a matter of priorities, and in part a feeling that by being more efficient, being smarter, we can do it with less funds.

Mr. **Yates**. How many of your officials are going back to class?

Dr. **Peck**. We have had a very successful Saturday morning class for the top officials in the Department. On three different Saturdays, Under Secretary Hodel came out and was briefed.

Mr. **Yates**. Do you suspect your group is getting smarter now?

Dr. **Peck**. We are trying.

Mr. Chairman, on the earthquakes I would note the Administration testified in favor of, and in support of, the extension of the Earthquake Hazard Reduction Act.

Mr. **Yates**. That does not mean much if you don't provide the money for it.

Dr. **Peck**. There is a substantial amount already in the budget with it. There is a minor cut compared with some of the other priorities of the Geologic Survey.

Mr. **Yates**. In view of the importance of the program, why should there be a cut at all? I am sure the Californians worry about it, don't they? Should I ask you that question, Mr. Wesson?

Mr. **Wesson**. No, sir, Dr. Hamilton is the expert this year.

Dr. **Peck**. Dr. Hamilton is Acting Chief Geologist. His papers are going through the mill but he was formerly Chief of our Office of Earthquakes.

Mr. **Yates**. That is fine.

Doctor, what do you say? Are you going to be hurt by the cutback?

Dr. **Hamilton**. Well——

Mr. **Yates**. Or is that an improper question to ask you?

Dr. **Hamilton**. Well, the reduction in the earthquake program is $2.6 million.

Mr. **Yates**. Yes. You will be hurt by $2.6 million? How much did you ask the Department for?

Dr. **Hamilton**. I do not know.

Dr. **Peck**. We asked for a continuation at level funding as I recall.

Mr. **Yates**. Is that part of the geologic and minerals resources surveys and mapping program?

Dr. **Peck**. Yes.

Mr. **Yates**. That was cut by almost $3.5 million from the amount requested, wasn't it? Do you remember how much you asked the Secretary for?

Dr. **Hamilton**. I do not know. I was busy doing research at that time. I was not worried about administrative matters.

Mr. **Yates**. Do you want to tell us tomorrow?

Dr. **Hamilton**. We will find out for the record, yes, sir.

Mr. **Yates**. All right. Also tell us how much the Secretary requested from OMB, and how badly will you be hurt?

[The information follows:]

EARTHQUAKE HAZARDS REDUCTION

The request to the Department for earthquake hazards reduction for the fiscal year 1983 budget was $37,013,000.

SEISMOGRAPH STATIONS

Dr. **Hamilton**. We feel we can accommodate the cut through some reduction in the number of seismograph stations. But also through stringing out some of the laboratory and theoretical work.

Mr. **Yates**. What happens if you cut back on the number of seismographic stations? Why did you create the original number?

Dr. **Hamilton**. Once you establish a seismograph network and record a certain number of earthquakes you can learn enough about the speed of seismic waves through the crust that you can then in effect calibrate the crust. Then you can achieve the same level of accuracy of location with fewer stations.

Now, you have to raise the threshold of detectability, but you still have the accuracy.

Mr. YATES. Well, are you raising the threshold?

Dr. HAMILTON. If we remove some of the stations, we would not locate earthquakes as small as we did in the past, but we feel this would still allow us to monitor the deformation——

Mr. YATES. Should you know about earthquakes that are so small?

Dr. HAMILTON. Should we know about them? We don't necessarily need to know about them. In the early stages of our monitoring program in California, the smaller earthquakes were very helpful in delineating the fault zones, but we have delineated many of the fault zones, so, it is now more a case of monitoring deformation.

Mr. YATES. I see. So, you really don't need the $2.6 million then?

Dr. HAMILTON. We feel we can continue the program at a reasonable level of respectability in the face of the reduction.

Mr. YATES. A reasonable level of respectability.

Dr. HAMILTON. We feel we can continue the monitoring in southern California and continue a level of research that would support the observational program.

Mr. YATES. Could you stand a bigger cut?

Dr. HAMILTON. I think that the budget that has been brought forward represents a balance of priorities and——

Mr. YATES. You are talking about your budget, or the total budget?

Dr. HAMILTON. The total budget.

Mr. YATES. What about your budget?

Dr. HAMILTON. My budget, my main area is the geologic and mineral resources area. Those priorities have been balanced against the rest of the budget as well.

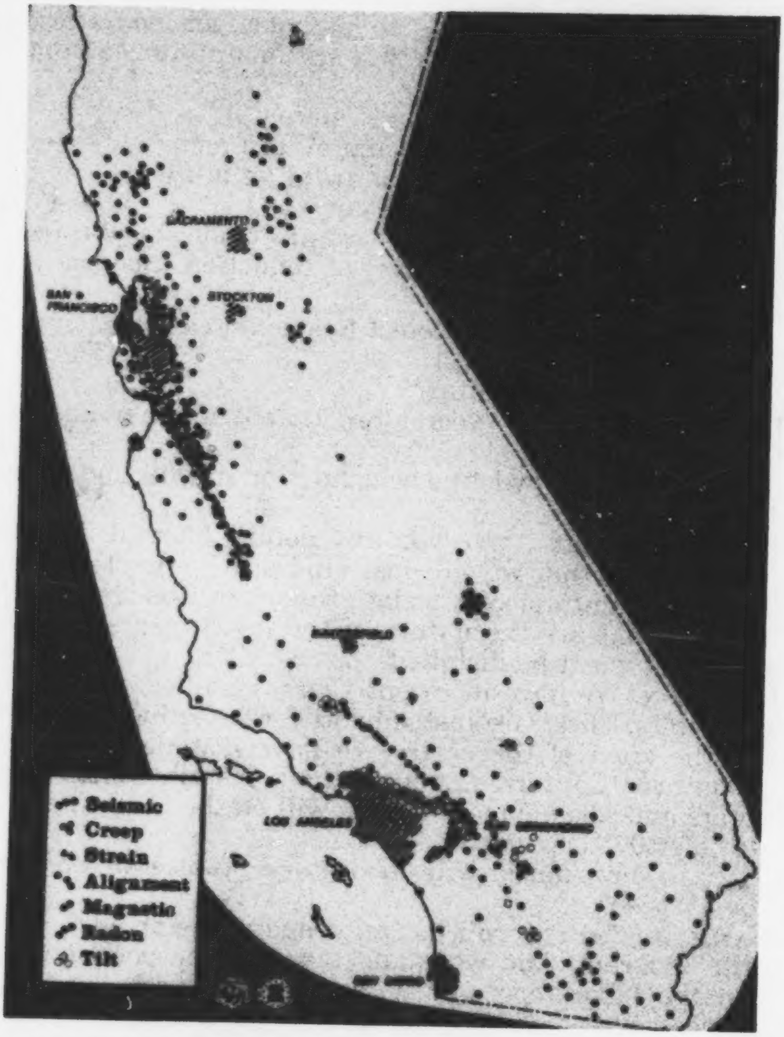
CALIFORNIA NETWORKS

Mr. YATES. Which of the networks in California are you going to reduce?

Dr. HAMILTON. It would probably be a reduction that would be distributed throughout the network. We try to pull out stations here and there in order to maintain overall coverage. We have this poster that shows various types.

[The chart follows:]

Geological Survey
Chart G-314-79


SACRAMENTO
SAN FRANCISCO
STOCKTON
BAKERSFIELD
LOS ANGELES
Seismic
Creep
Strain
Alignment
Magnetic
Radon
Tilt

This map illustrates the distribution of instrumental networks and survey stations of different kinds for measuring natural phenomena in the search for recognizable anomalies preliminary to an earthquake event. Even though the networks are currently in a experimental phase, the greatest concentration of instruments is seen to lie along or near potential source faults, in and near the major population centers of central and southern California.

We have seismographic stations measuring seismic, creep, strain, so on.

You can see we have fairly good coverage throughout the State. So, what we would try to do is to pull out selected stations to reduce the density of the network, but still maintain the broad coverage.

Mr. YATES. Could you pull out some more?

Dr. HAMILTON. Could we pull out more? The more you——

Mr. YATES. Looks like you have an awful lot of them.

Dr. HAMILTON. The more you pull out, the higher you are raising the threshold of detectability. So, there are tradeoffs. We feel that we can accommodate a certain level of reduction. But the further you go, the less you detect.

Mr. YATES. You will have to detect less next year, won't you?

Dr. HAMILTON. That is correct.

Mr. YATES. And the year after?

Dr. HAMILTON. Well, the year after, that is another budget. We will see.

Mr. YATES. How long will the schedule for installation of instruments be extended?

Dr. HAMILTON. I can't give you any details on that. What that really represents is that we will just kind of have to strike out the installation program to accommodate the overall budget reduction.

Mr. YATES. What are the nature of the instruments that should be installed that won't be installed?

Dr. HAMILTON. We have in recent years, installed some volumetric strain meters. These are instruments for detecting overall deformation of the crust of the earth. We have installed a number of those in southern California. And we have installed other types of creep meters and seismic meters. This will be the general area that we would defer deployment in.

Mr. YATES. How much will laboratory studies of earthquake models be reduced?

Dr. HAMILTON. The overall budget reduction is about 7 or 8 percent of the program. And we would take a disproportionate share of that in the laboratory studies, so it would probably be somewhere between 10 and 20 percent.

EARTHQUAKE PREDICTION

Mr. YATES. When are you going to begin research studies on earthquake prediction methodologies?

Dr. HAMILTON. When are we going to begin those studies?

Mr. YATES. Yes.

Dr. HAMILTON. Well, in effect, we have been doing those studies for many years.

Mr. YATES. Have you?

Dr. HAMILTON. In recent years there have been some developments with how you handle earthquake precursors in a probablistic sense. We are now developing a model of how the earthquakes occur that incorporates probablistic-type data. So, in a sense, we are developing a concept or model that is applicable to earthquake prediction.

The big problem in earthquake prediction has been in determining the regularity of precursors.

COOPERATIVE PROGRAM WITH THE CHINESE

Mr. **Peck**. We are also working rather extensively with the Chinese who have had some notable successes in earthquake prediction, part of the USPRC cooperative program.

Mr. **Yates**. Are they cutting back too?

Dr. **Peck**. Actually they have cut back quite a lot over the last year in various programs because of the overcommitted—I have been reading things in the papers about cutting back on commitments on steel mills. So, they haven't cut back so much on the earthquake program that I know of.

But, I am not sure if I would know if they had.

Dr. **Hamilton**. The cooperative program we have with the Chinese is still going on.

Dr. **Peck**. They have a very large program. They have a bureau as large as the whole Geological Survey studying earthquakes.

Mr. **Yates**. They have very large earthquakes?

Dr. **Peck**. And a lot of people.

VOLCANO HAZARDS

Mr. **Yates**. Let's talk about volcano hazards. This is being reduced almost a third.

Dr. **Hamilton**. Yes.

Mr. **Yates**. How did you arrive at almost a one-third cut for this program? It's a pretty high priority program, isn't it?

Dr. **Hamilton**. It is a high priority program. But it was judged that other programs were of even higher priority.

Dr. **Peck**. At that level of funding we can continue monitoring Mount St. Helens sufficiently to be in a position to warn about floods or volcanic eruption. We will have to cut back considerably in the research projects and monitoring of other volcanoes, but we will still have a small network of seismographs on other potentially active volcanoes.

Mr. **Yates**. How many potentially active volcanoes are there?

Dr. **Peck**. Is it a dozen? We have a lovely photo, I am sure.

[The chart follows:]

ACTIVE VOLCA

Geological Survey
Chart G-345-82

Maps showing active and potentially active volcanoes in the United States and locations of current and future investigations by the Geological Survey.

Dr. HAMILTON. The main areas in the Cascade Range, which extends from the Canadian border down into northern California. Mount St. Helens is here. In addition, in southern Alaska there are a number of potentially active volcanoes and of course Hawaii.

Mr. YATES. These are all potentially active?

Dr. PECK. Yes.

Mr. YATES. I suppose Mount St. Helens is up at the top of the potentially active list?

[The chart follows:]

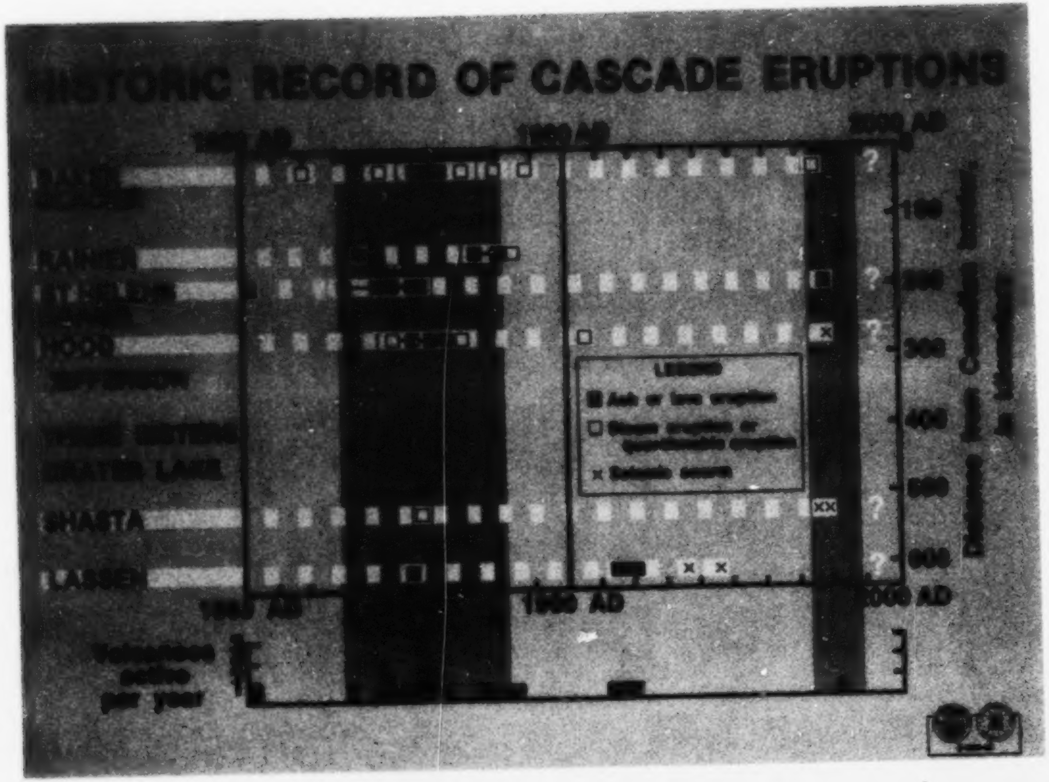


Chart showing volcanism in the Cascades during the past 200 years.

Geological Survey
Chart G-383-82

Dr. **Hamilton**. Lassen was last active about 1915, I think was the last eruption. But quite a few of these—this is a list of the volcanoes from north to south starting with the Canadian border and going down. The ones that have the light gray running along here are ones that have been active in historic time. You can see that back in the middle of the last century there were six of these volcanoes that shows a certain degree of activity.

For example, where you see the black squares, there was an ash or lava eruption. You can see Baker, Rainier, St. Helens, Hood, and Lassen showed that. Then steam eruption at Shasta. I guess Dallas knows more about this than I do, but the volcanoes tend to come on, turn on and turn off. The concern is at this time whether we might be entering an episode of renewed activity.

Dr. **Peck**. The fact that so many of them were active back in the middle 1800's suggests some regional strain pattern led to that activity.

Now, one wonders if that is not recurring. So, that is why we are monitoring the other potentially active volcanoes.

Mr. **Yates**. Did you just advance a reason for a reduction?

Dr. **Peck**. It is a matter of priorities and constrained times. And the Department is taking its share of the general budget reductions of the non-Defense agencies.

Mr. **Yates**. Well, if there is a question of temporary activity, why shouldn't we prepare for it?

Dr. **Peck**. We are maintaining enough monitoring systems. We have mobile instruments and trained observers. These are the kind of volcanoes that give you some indication by small——

Mr. **Yates**. Warn you ahead of time?

Dr. **Peck**. That is correct.

Mr. **Yates**. How long ahead of time?

Dr. **Peck**. Well, in Mount St. Helens, for example, we were warned a week ahead of time, magnitude five earthquake and quite a cluster of earthquakes we detected as part of our geothermal monitoring.

Mr. **Yates**. Would you put in the record the 11 eruption research projects and volcano projects being terminated?

Dr. **Peck**. We will.

[The information follows:]

ERUPTION RESEARCH PROJECTS AND VOLCANO MONITORING PROJECTS BEING TERMINATED

1. Research on the chemical and physical characteristics of the Mount St. Helens pryoclastic flows, which contribute to understanding their emplacement mechanisms and associated hazards.

2. Research on the distribution, post-depositional changes, and chemical and physical properties of the Mount St. Helens ash fall, which bear on future erosion and sedimentation problems in Washington, Idaho, and Montana, where ash fall was heaviest.

3. Research on the distribution of volcanic ash as recorded in glacial ice throughout the world, providing information on the frequency of major world-wide ash eruptions.

4. Research on the occurrence of volcanic ash in lake sediments in western United States, providing a record of the frequency of major ash eruptions in the U.S.

5. Experimental and theoretical research on the nature and properties of solid-liquid gas mixtures which contribute to understanding the nature of explosive eruptions in general and has provided our current understanding of the nature of the Mount St. Helens "blast" of May 18, 1980.

6. Experimental and theoretical study of the interrelationship between faulting and magma intrusion, particularly on the rate at which such processes occur. Such studies contribute to the interpretation of seismicity related to volcanism and potentially aid in the prediction of eruptions from seismic data.

7. A regional gravity survey of Lassen Volcanic National Park, intended to determine the presence or absence of a suspected magma chamber, knowledge used in assessment of potential eruption hazards in the area.

8. Research on the response of electric self-potential and ELF (extra low frequency) electromagnetism to magma movement in Hawaii, methods that have considerable potential as monitoring techniques.

9. Research on the chemical and mineralogical composition of Hawaiian lavas, necessary for determining the long term past and future evolution of Hawaiin volcanoes.

10. Studies of the crystal structures of volcanic materials, which contribute to understanding the conditions (temperature and pressure) of their formation.

11. Experimental study of the conditions of formation of volcanic rocks and minerals as determined from laboratory simulation of temperatures and pressures at depth in the earth.

MOUNT ST. HELENS

Mr. YATES. Now let's talk about Mount St. Helens for a moment. There was an eruption a couple of weeks ago. If your hydrologic monitoring is reduced in the drainage area around Mount St. Helens, does that mean less accurate and timely information will contribute to a greater loss of life and property in the future?

Dr. PECK. I will have to ask Mr. Cohen to address just how we are modifying the hydrologic monitoring at Mount St. Helens.

Mr. YATES. Mr. Cohen.

Mr. COHEN. As a matter of fact, Mr. Chairman, that is one of two areas in which we are concentrating our remaining financial resources in fiscal year 1982 and fiscal year 1983.

So, the reduction referred to in the budget is a very small one. Two gaging stations. We think the risks associated with discontinuing those two stations probably are negligible, or virtually so, inasmuch as we have gained considerable experience in the past 2 years at most of these gaging stations which were installed very, very rapidly.

We could not place them optimally, and we think a minor reduction of two gaging stations will not affect the ability of our Agency and other agencies to measure floods and provide warnings.

Mr. YATES. Why does your budget indicate that you are reducing monitoring for floods and channel clogging around Mount St. Helens?

Mr. COHEN. Well, we have had in the past, and will continue to have, a multi-faceted hydrologic program at Mount St. Helens in response to the——

Mr. YATES. But you are cutting back on it?

Mr. COHEN. We are cutting back on some aspects of it and maintaining those that are of the highest priority in terms of warning, flood warnings with regard to property, potential property damage and damage to lives.

Mr. YATES. Will the reductions affect that? The warnings?

Mr. COHEN. No, sir. We are working very closely with the National Weather Service which has the responsibility throughout the United States and at Mount St. Helens for flood forecasting. We are not going to threaten or endanger their ability for flood forecasting.

Mr. YATES. You are going to have two fewer research projects in the next fiscal year. What types of activities will you curtail?

Mr. COHEN. We will be eliminating rainfall runoff studies and terminating our water quality program.

Mr. YATES. The amount of money is the same?

Mr. COHEN. No, there is a reduction for hydrologic activities in fiscal year 1983.

LAND SUBSIDENCE IN TEXAS

Mr. YATES. A large volume of fluid was extracted in Houston, Texas with corresponding subsidence. What are the fluids that you have taken out that created the problem?

Dr. PECK. This is part of the land subsidence program.

Mr. YATES. Yes.

Dr. PECK. I think this was water withdrawal in the City of Houston.

Dr. HAMILTON. The general cause of land subsidence in that area? It is groundwater withdrawal.

REACTOR HAZARDS

Mr. YATES. What is the reactor hazards research program? Is that the one you testified to earlier?

Dr. PECK. That is backup for the program we testified to—there are two parts of the program. One is the part Mr. Devine talked about, which is responding to NRC requests to evaluate stuff. This is the research program that backs that up, and includes people who carry out the research and also help out in advising NRC.

Part of it is looking at areas that might be potential, regions that include potential sites for reactors to get a better understanding of the geology. Partly it is developing better techniques for looking at faults, how recently they have been active, so it gives us a better capability to establish ground motion limits for the NRC.

Much of it is sort of complementary to our earthquake program. Much of the effort in the earthquake program is in the West because that is where the most active faults are. Much of the reactor hazards program is focused in the East because that is where the reactors are mostly built.

WILDERNESS MINERAL SURVEY PROGRAM

Mr. YATES. Let's talk about the wilderness mineral survey program. You want $8.4 million. Suppose the committee were to provide language that no leasing would occur in wilderness areas, could this program be eliminated?

Dr. PECK. This is—No, I do not think so. This program is aimed at this. We and Bureau of Mines study areas that have been designated for possible inclusion in the Wilderness System. We study the mineral resources with the Bureau of Mines so that can be balanced with the timber resources, grazing resources, recreational and esthetic uses to give the Administration and Congress some sort of a balanced viewpoint before setting it into the Wilderness System, where indeed it is, depending on what happens on all this other jazz, relatively safe from leasing.

Also, there is another important aspect or reason for studying it. In the course of our study we may identify very promising areas for mineral resources. Some of them are critical minerals that the Nation may well need in the future. If indeed there is some crisis and we need to go back in and look more closely at those areas, we have pinpointed targets for where industry can move in rather quickly to see whether indeed there is a deposit of cobalt or something that can be useful.

Mr. PENDLEY. Mr. Chairman, a fundamental aspect of the Secretary's Wilderness Protection Act proposal is that the Congress be informed, on a periodic basis, on what new mineralizations might have occurred, or might be seen or understood to be within these wilderness areas for possible future development in the case of an emergency.

As Dallas is particularly capable of addressing, this knowledge about mineralization and where it occurs and how it occurs is a constantly evolving art. There are areas in the country where years ago we thought were barren of minerals and mineralized zones and that we now found are reaching mineral activity. This is an important aspect of our strategic minerals program which the Secretary is concerned with.

Mr. YATES. Why are funds appropriated to you for the Forest Service work but not BLM work?

Mr. FREDERICK. It was an administrative decision, Mr. Chairman, to appropriate the funds directly to the Bureau of Land Management and subsequently have those funds pass through to the Geological Survey. That was part of their overall program for assessing the possible wilderness lands.

Mr. YATES. Does GS follow the same guidelines as BLM?

Mr. FREDERICK. Yes, sir. One important answer to your earlier question is, for the immediate future, for fiscal year 1982, 1983 through 1987, we will be particularly finishing the Forest Service lands and addressing BLM lands that may have wilderness characteristics for decisionmaking purposes.

Dr. PECK. And the next 2 years are very critical on the Forest Service when we are heading up to a January 1984 deadline, which we fully intend to meet. But this is the last major——

STRATEGIC AND CRITICAL MINERALS

Mr. YATES. Why the increase for the stragetic and critical minerals program?

Dr. PECK. That reflects the priorities of the Administration, priorities which I wholeheartedly support, that strategic and critical minerals are an important subject area for the Nation. That not enough has been done over the past few years in developing new models and assessing the mineral potential and developing mineral information systems. It is a neglected area that needs greater support.

Mr. YATES. In your 1981 report, you talked about hard minerals from the deep sea. How does this program relate to that?

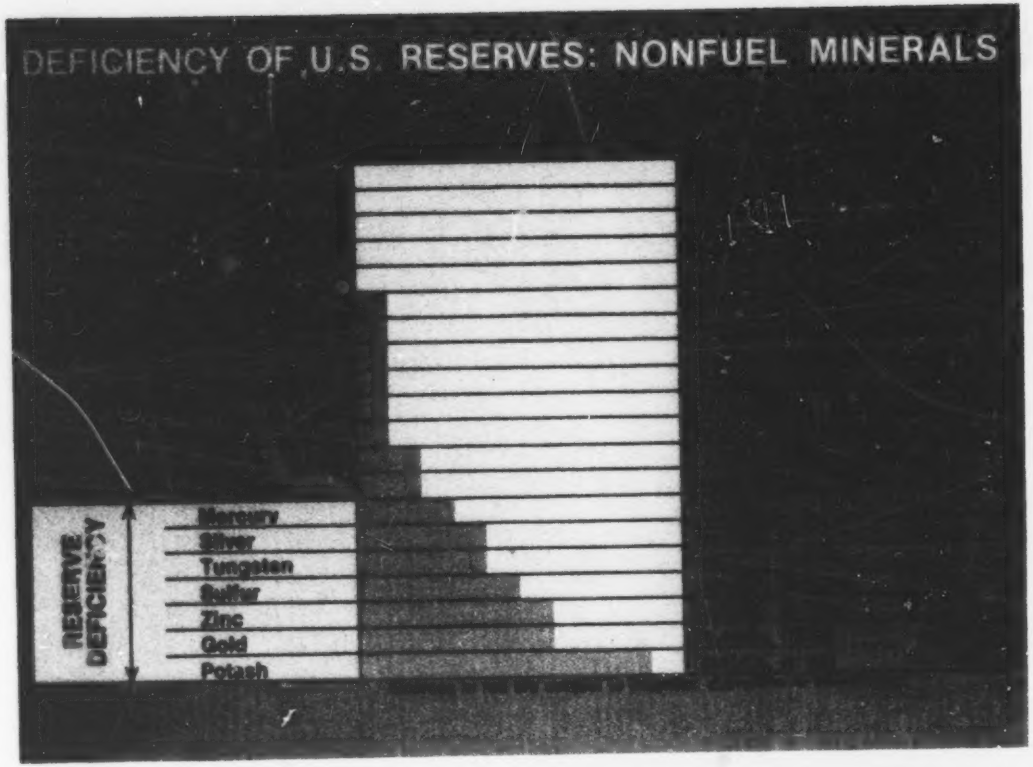
Dr. PECK. Well, the programs complement each other. I forget exactly what we were talking about in hard minerals. There is a new initiative by the Secretary of the Interior and the Department to move towards leasing so-called hard minerals. Hard minerals include such things as manganese nodules off of Georgia, and also sand and gravel off the north coast of Alaska. The decision was made to go ahead. These have not been leased in the past. There is a tremendous demand for the sand and gravel for drilling platforms in the Beaufort Sea for oil exploration. The decision has been made to go ahead on a case-by-case basis to lease these. In the future there are other hard minerals in the OCS that there may be interest in leasing.

Gold off Alaska, platinum off Alaska. And I mentioned in my opening remarks, we have discovered metallic sulfides in the Juan De Fuca Ridge, drawing on other deposits experts from this program we are discussing right now. This is just laying out the degree of dependency of the Nation on imported minerals. Recording the adequacy of U.S. reserves.

Mr. YATES. Okay.

Dr. PECK. We have another chart.

[The chart follows:]



Geological Survey
Chart G-374-82

Chart showing United States deficiency of nonfuel minerals based on estimated demand through the year 2000.

Dr. **Peck**. Much of the focus on the minerals program will be in the mineral commodities shown in the dark grey. There are indeed limited known reserves and resources but we have pretty good ideas—But there are some good leads that we are beginning to follow up on. New types of manganese deposits for example that may be wide-spread and economic and have simply been overlooked because they don't look like the typical manganese deposits.

Mr. **Yates**. Okay. Well, let's come in at 10:00 o'clock tomorrow. Thank you very much.

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THURSDAY, APRIL 1, 1982.

GEOLOGICAL SURVEY (Continuation)

WITNESSES

DANIEL MILLER, ASSISTANT SECRETARY, ENERGY AND MINERALS
DALLAS PECK, DIRECTOR, U.S. GEOLOGICAL SURVEY
DOYLE FREDERICK, ASSOCIATE DIRECTOR, U.S. GEOLOGICAL SURVEY
HILLARY A. ODEN, ASSISTANT DIRECTOR FOR PROGRAMS
BRUCE B. HANSHAW, ACTING ASSISTANT DIRECTOR FOR RESEARCH
ROBERT L. WESSON, ASSISTANT DIRECTOR FOR RESOURCE PROGRAMS
JAMES F. DEVINE, ASSISTANT DIRECTOR FOR ENGINEERING GEOLOGY
EDMUND J. GRANT, ASSISTANT DIRECTOR FOR ADMINISTRATION
PHILIP COHEN, CHIEF HYDROLOGIST
RUPERT SOUTHARD, CHIEF, NATIONAL MAPPING DIVISION
ROBERT M. HAMILTON, ACTING CHIEF GEOLOGIST
GENE THORLEY, CHIEF, OFFICE OF EARTH SCIENCES APPLICATIONS
PERRY PENDLEY, ACTING DIRECTOR, MINERALS MANAGEMENT SERVICE
JOSEPH W. GORRELL, DIRECTOR OF BUDGET, DEPARTMENT OF THE INTERIOR
DONALD GRYBECK, DEPUTY CHIEF, OFFICE OF MINERAL RESOURCES

Mr. REGULA [presiding]. The Interior Subcommittee will come to order.

We will continue the hearing on the United States Geological Survey.

SIDE-LOOKING AIRBORNE RADAR [SLAR]

I understand from staff that there are still a number of questions to be asked, but I might, since I was not here yesterday, briefly discuss the side-looking radar program.

Dr. Peck, do you have any comments you might want to make, or do you just want to respond to the questions?

Dr. PECK. I think I will just respond to the questions.

Mr. REGULA. As I understand it, at yesterday's hearing there was some discussion about the commercial usage of the program. Have you had any indication from the private sector as to the value this would have for their programs of mineral development, as well as land use?

Dr. PECK. Well, of course, we have had several strong indications of interest by mining companies involved with coal and oil and gas in the Appalachians. We also solicited expressions of interest from the State geologists. A number of them responded in a positive way.

State surveys traditionally have small budgets. They were not able to support their indications of interest by offering to share in the cost of the program, but they pinpointed the areas of interest, and most of them were interested, so I think there is—particularly in an area like the Appalachians, with heavy soil cover, vegetation and rather obscure geology and fractures which are widespread and important to mining or gas recovery but difficult to locate without additional aids—a lot of interest.

Mr. **REGULA**. I understand there was a seminar on this subject this past year. Were you there?

Dr. **PECK**. I was not there. There was a meeting on the subject at Sioux Falls at our EROS facility. Dr. Salisbury, manager of the EROS program, can speak to that if you wish.

Mr. **REGULA**. Is he here today?

Dr. **PECK**. Jack.

Dr. **SALISBURY**. I am here, but actually, Dallas, I was just on board and did not attend.

Mr. **REGULA**. All right. I have had some of the results from this symposium. I am going to read a comment by Dick Pascucci, Chief Scientist for Autometric, Inc., and he said:

"Those of us who have worked with radar on a regular basis have never had any doubt about this great incremental contribution. We see it all the time. We see it every day, and an awful lot has been demonstrated to you by many of the people who do use it every day.

"Enormous benefits you can get from radar and exploration surveys has been demonstrated. It is useful and a necessary tool."

And also, at the same symposium, Bill Davies, who I think was then in the Department——

Dr. **PECK**. He still is a geologist.

Mr. **REGULA**. Geologist at the Astrological Studies Branch of USGS, and I quote what he had to say:

> We have very good retrospect on what could have been done had we had radar in several recent natural disasters. Frankly, we could have saved the Government something on the order of a billion dollars on just one occasion. We know where the landslides are and what is happening, but we don't know why.

He goes on to say, and I quote:

> Our only problem is that we can't assimilate all the data that is available to us on the radar. I think we have so much data on the Eastern stuff that the Government ought to certainly take steps to expand it and use it to the fullest, as I think there is where we are going to begin to understand what is really valuable information, and it would take a lot of pressure off of our neck.

Then one additional quote:

> Engineering jobs in the United States now number about 30,000. They are not rich. They cannot afford to buy radar directly, but they certainly need it, and they have not had access to radar up until now.

I think that this is a very important point, because unlike our friends in the oil business, we have one additional mission in life, and that is saving lives and property. That is what engineering is all about, and human life is pretty valuable.

So my plea is, let's use the maximum we can of certain existing high-quality radar and try to base around that and develop out from that. Certainly there has been no loss in dollars in investing in existing radar and expanding existing radar and then doing the research as part of the operation itself.

DEFENSE USE OF RADAR

I might add also that from a hearing yesterday on military matters, I understand the Defense Department uses radar extensively as a mapping tool.

Do you have any knowledge of that?

Dr. PECK. No, I don't.

Mr. FREDERICK. Mr. Chairman, we do have some familiarity with the Defense use of radar. I think they use it for several different purposes. One is as a reconnaissance tool. Another tool is to recognize radar-significant features so that they can include that sort of information into radar navigation systems. Indeed, that is the kind of thing, in areas of cloud cover, that sort of thing, where they would welcome radar information.

Mr. REGULA. Apparently, they have found that an airborne radar survey is very useful in setting up guidance systems.

Mr. FREDERICK. Well, they have developed, in the Department of Defense, several radar and terrain recognition guidance systems, and that sort of information would be, again, an input into the development of those data bases.

APPLICATION OF RADAR FOR HAZARD PROTECTION

Mr. REGULA. In a recent press release from the USGS, it is reported that geological and hydrological hazards such as landslides, earthquakes, floods, and so on, cause an estimated $8 billion in losses to the Government each year. That is just the Government.

Are there useful applications of radar in the area of hazard protection that could potentially reduce loss?

Dr. PECK. In terrain where it is rather obscure, as in the Appalachians, radar is very useful. Also in areas of perennial cloud cover, just the topography as well as the outlines of land sites, areas such as the Aleutians, radar is useful.

That is one reason we improved coverage of the Aleutian chain as part of our proposed SLAR program for fiscal year 1982.

SLAR COVERAGE FOR FISCAL YEAR 1982

Mr. REGULA. What areas do you anticipate covering in 1982, in addition to the Aleutian Islands?

Dr. PECK. The other areas include an area of Southern Nevada for synthetic or side-looking radar. It may be useful in revealing fundamental fracture systems that control distribution of ore deposits. Use of side-looking radar there would complement ongoing studies of the ore deposits of Southern Nevada.

Another area would be a large block of quadrangles, 250,000 quadrangles in the Appalachians, in Virginia, West Virginia, and Pennsylvania. We have ongoing studies there of the fracture pattern. That is an area of particular interest to industry, too, because of the relevance of fracture porosity to the occurrence of gas, and also the relevance to finding faults that may offset coal beds and affect the minability of coal, and also the safety of coal mining.

Mr. REGULA. I was just thinking, a few years back we had a couple of dams that broke because apparently they were built on fractures, and then there was a program of inspection. I assume that is still ongoing.

My question is: Would not a data base that included radar possibly preclude either the construction of a dam, or at least have resulted in a better design to take into account the fault, had we had this kind of information available?

Dr. PECK. In some areas, particularly forested areas or areas of heavy soil cover, it might indeed reveal fractures that were not obvious on the aerial photos or obvious in geologic mapping on the ground.

Mr. REGULA. Well, do you think that even in the absence of vegetation, or some type of cover, that a visual inspection on the ground is going to as accurately portray a fault as would the data obtained from an airborne radar system?

Dr. PECK. I would think that would vary from place to place. It would vary depending on the look angle of the radar. The look angle is enormously important in determining whether features like fractures, subtle geographic changes, show up or not.

I have done a bit of geologic mapping myself. Some faults and fractures are really very obvious on the ground. It is going to vary from one locality to another, sir.

Mr. REGULA. Apparently they are not too obvious, because yesterday at our military construction hearing we had two particular construction projects in which the per-square-foot cost was very expensive. Both of them were additions to existing buildings.

So the question came up, why so expensive? The answer was, they had discovered, in both instances, that there are geological conditions that give rise to a potential earthquake hazard, maybe not large like the San Andreas, but nevertheless, they have to add additional cost in the construction to offset this. They have discovered that there are hairline fractures in the earth's crust at these two locations.

Now obviously, and the question I raised is: "Why did you build there to start with since this is a high-risk area? You are saying it takes an extra $30 or $40 a square foot to account for that construction problem."

And they said, "Well, whoever made the initial decision didn't recognize that the fracture existed."

So I guess visual inspection doesn't always give you a feel for this.

Dr. PECK. That is right. But then there is another question in matters like this that has to be resolved, and that is: Does the fault or fracture represent an active fault?

Mr. REGULA. It is $30-a-square-foot active.

Dr. PECK. This particularly comes in the case in siting nuclear reactors.

Mr. REGULA. I understand, but these were conventional buildings that they are saying will have additional cost per square foot because they have to design some structural advantages in order to compensate for it.

Dr. PECK. Yes.

Mr. REGULA. I guess it would indicate that these fractures, which are indicative of an unstable area, are not always clearly apparent on visual inspection. Maybe radar doesn't pick them all up either. I don't know.

Dr. PECK. That is right. What the radar picks up are fractures reflected in the topography. Sometimes they were reflected in a rather subtle way. Sometimes they aren't reflected in the topography at all. Sometimes you really don't find them until you clear away the soil over a broad area and get down and map it on your hands and knees.

Mr. REGULA. Well, I think there are two points on the radar that would hopefully make it cost effective. One would be to apprise the private sector of the resource base available in the Nation in areas such as you have indicated; and secondly, to provide another element of reducing the risk on safety matters, such as dams and public buildings.

PRIORITIES FOR SLAR

If we go ahead with this program in 1983, what else do you think might be mapped? What is your next priority other than what you have indicated?

Dr. PECK. Well, we are, of course, in the initial stages on this priority list. The RFP for this should go out Monday. I don't think we have completely thought through what the program would be in 1983, if there is one, although I think we would be tempted to have more coverage in the Appalachians. However, as I pointed out yesterday, there is a sort of logical conflict in part of this.

I explained that we have a decreased budget in many areas this year. One reason, one way we are accommodating that decrease and still producing the products that the Nation needs, is by cutting back on programs, shifting programs over to industry when industry can pick them up.

An example is in drilling in areas subject to coal leasing. We are cutting our budget, or MMS's budget, and putting that burden on industry to do the close-spaced coal drilling.

In determining hazards surveys on the OCS, here we have done detailed surveys to the tune of some $5 million a year, before the tracts are leased. Now we are going to put the burden on doing regional surveys on the OCS, and then put stipulations on the leases so that the industry that leases the tract will have to do enough detailed surveys of the tract to determine whether there are hazards.

Here are two cases where we figure industry can do the job to their advantage.

Aeromagnetics and side-looking radar are other examples where the service is available commercially, and industry can purchase imagery for areas of their concern.

Mr. REGULA. Aren't there a lot of smaller developers, and if we want to have a broad base in our economy, we need to give them access? Aren't there many of those that could really not get access in a way that you are describing?

Dr. PECK. Well, it depends on how well they are funded. They can contract for it. It is expensive to contract for imagery covering of a small area, but they can contract for it as they do for aeromagnetics.

Mr. **Regula**. If I would interpret the title of your Department correctly, United States Geological Survey, I believe that that would imply that the mission, historically, is to provide a data base on the geology of the United States.

Is that what you understand the mission to be?

Dr. **Peck**. Yes.

Mr. **Regula**. Would this not be a very valuable asset in terms of meeting the mission of providing a survey of the geological makeup of this Nation?

Dr. **Peck**. I think it would be a useful contribution, sir. I would just wonder, during times of constrained budgets, if we have to trade off that versus other work, I would not——

TRADE-OFFS FOR SLAR

Mr. **Regula**. What is the trade-off? If this goes, what gets shorted? Let's talk about the priorities and cost effectiveness of the conflicting programs.

Dr. **Peck**. For example, during this last year we have reprogramed close to $3 million into acquisition and analysis of side-looking radar.

Mr. **Regula**. Right.

Dr. **Peck**. Those funds came from a variety of programs. For example, in our mapping division it means a cutback in the acquisition of aerial photography and preparation of topographic maps. So, some of the areas remain uncovered, or the maps remain old and not updated.

In our Water Resources Division it means a cutback in ground water geology studies, because there are fewer funds to send people into the field.

In our Geologic Division it comes out of a variety of programs. It means fewer areas studied geologically, fewer areas analyzed for their mineral resources.

Mr. **Regula**. But each one of these missions that you describe here is also covered by the imagery provided by the radar program, certainly on a much larger scale and, I would suspect, in a much more cost-effective manner than would be done by a hands-on or on-the-ground kind of a survey.

Dr. **Peck**. Well, we have found that the remote sensing is indeed useful. Remote sensing in aeromagnetics, aerial photography, side-looking radar, Landsat imagery, they are all useful adjuncts in studying an area, give a marginal advantage, but in almost all areas, you have to couple that with on-the-ground studies to verify features that you find.

Mr. **Regula**. Wouldn't the radar be the beginning point from which you would develop the on-ground evaluation of physical characteristics that are determined by the data that you gain from this?

Dr. **Peck**. No, because of the distortion in side-looking radar and the fact that it shows some features and not others, and in some terrain areas are shadowed out. But usually your starting point is aerial photography; ideally, aerial photography flown from a low level and a high level. There are a lot of features that show up on the aerial photography.

AERIAL PHOTO COVERAGE

Mr. **Regula**. Has the United States been totally flown? I know that the Soil Conservation Service and Agricultural Stabilization Service all have, at least in our areas, aerial photos of all the farmland in the area. I assume they must get some of these,—at least I hope they are—from USGS to avoid duplication of taxpayer expense.

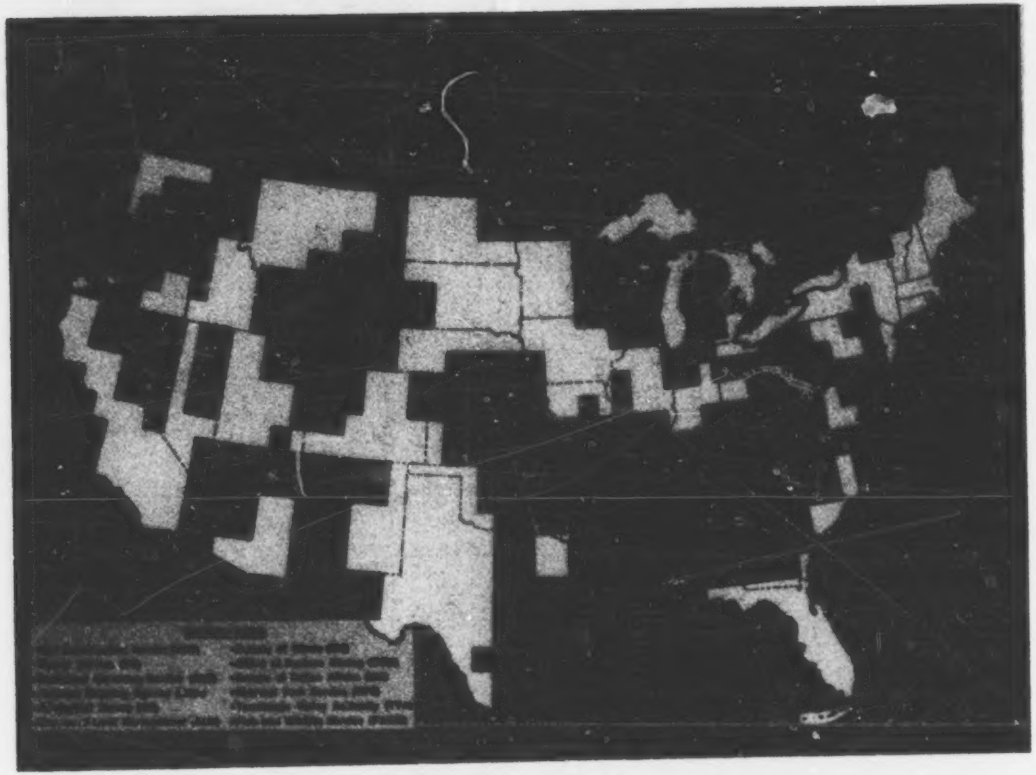
Dr. **Peck**. Mr. Frederick can talk to that. You need to update that aerial photography constantly because of agricultural changes and changes even in the land surface.

Mr. **Frederick**. Mr. Chairman, if the question is whether or not the United States has been completely covered with aerial photography, I guess the answer would be essentially, yes. But it has been a long time since it has been completely covered with systematic photography.

So the Soil Conservation Service, Forest Service, and Agriculture Stabilization and Conservation Service collect a great deal of photography, as does the Geological Survey. That information is accumulated, and is available.

A further thing on that, about 3 years ago, the Geological Survey, in cooperation with all those agencies listed on that particular map, put together a cooperative program for the collection of systematic aerial photography of the United States. The chart shows the status of the collection.

[The chart follows:]



The National High-Altitude Photography Program is an interagency coordinated effort to acquire multi-purpose aerial photography over the conterminous U.S. and to develop a national aerial photography data base for Federal, State, and private users. The graphic illustrates completed photography in FY 1980 and FY 1981, and photography scheduled in FY 1982.

Mr. Frederick. In this particular instance, the program is funded by the specific users based on the judgment of program worth.

AVOIDING DUPLICATION

Mr. Regula. When you say "users" you are talking about other agencies such as SCS or ASCS, and so on?

Mr. Frederick. Yes, sir. The cost of the data collection is paid for by those program users. The data is put into the data base to be made available to the program users, as well as to everyone else who has use for the information.

But I think we need to comment on this. It is funded by specific program justification. We collect it when we have a program need. We are expediting it by putting together the requirements of all those agencies to collect systematic——

Mr. Regula. Does that include Defense?

Mr. Frederick. Yes, sir.

Mr. Regula. So if I understand you correctly, you are making a real effort to avoid duplication——

Mr. Frederick. Yes, sir; we are.

Mr. Regula [continuing]. Of imagery by the various agencies of the Federal and, I presume, State Governments.

Mr. Frederick. Yes, sir. We do that in two ways. One is putting together the program, deciding where to fly, how to fund it.

Secondly, collecting all of this information, as well as the other information relating to aerial photography availability, and including it in our National Cartographic Information Center, which makes that information available on the whereabouts of the aerial photography to the public.

Mr. Regula. What is your goal, in terms of aerial photography, as far as updating, is it a 10-year cycle, 5-year cycle?

Mr. Frederick. Our goal was originally to cover the U.S. in about 5 years. I think maybe we will make it in 6 or 7, looking at the money that is available now. Our thought would be to update that on a 5- to 10-year cycle, depending on the area we are looking at, the changes that have occurred.

Mr. Regula. Off the record.

[Discussion off the record.]

Mr. Regula. When was USGS started?

Dr. Peck. In 1879.

Mr. Regula. So this was quite some time after the original land surveys in many of the Midwestern States, because they go back to about 1812.

Dr. Peck. Yes. Those land surveys were not topographic surveys.

Mr. Regula. No, they were metes and bounds.

Dr. Peck. Yes.

MINERALS MANAGEMENT SERVICE

Mr. Regula. I understand you have a new Minerals Management Service; is that correct?

Dr. Peck. Yes, and we have the Acting Director here, Mr. Pendley.

Mr. Pendley. Congressman.

Mr. Regula. What is the mission of this group?

Mr. **Pendley**. Mr. Chairman, the Minerals Management Service was created out of the Conservation Division, in its entirety, on the 19th of January of this year by Secretarial Order.

The primary desire of the Secretary was to place Secretarial-level emphasis upon the royalty management program and assurance of proper, full and complete collection of the royalties owed to the American people as a result of the development of Federal and Indian lands.

As you know, the Conservation Division includes more than royalty management. It has several other missions, basically, assessment and classification of minerals on the lands, and supervision of those lands when they are under leases issued on the Federal lands and on the Indian lands; insuring maximum economic recovery; and assuring proper logical mining units, for example, in coal lands.

MMS/GS RESPONSIBILITY

Mr. **Regula**. This is all part of your new mission?

Mr. **Pendley**. Yes, sir; it is.

Mr. **Regula**. You are not duplicating what USGS is doing, I hope, which is prelease evaluation; is that correct?

Mr. **Pendley**. Not at all. Not at all.

Mr. **Regula**. As I understand it, to get the two roles in perspective, the USGS would do the survey and evaluation, and probably assemble a data base as to the mineral potential of the lands that make up the United States.

Dr. **Peck**. Usually what we do, is to do regional surveys of areas of both Federal and non-Federal land. Then when it comes down to a detailed examination of a tract, a very large-scale mapping and studies, we hand that study off to MMS where they have teams of geologists doing somewhat similar studies, but with more drilling and drill-hole data, and more detailed study.

Mr. **Pendley**. There has always been a split between what the Geologic Division does and what the Conservation Division does.

All that the Secretary has done is to take the Conservation Division, in its entirety, and pull it aside under the direct supervision of the Under Secretary and Minerals Management Board, give a new name to it, the Minerals Management Service, and augment its responsibilities with regard to royalty collection.

Mr. **Regula**. But as far as division of responsibilities between USGS and the prior Conservation Division, now the Minerals Management Service, there has been no change under the new arrangement; is that correct?

Mr. **Pendley**. That is correct.

Dr. **Peck**. That is correct.

I might add, the Secretary made this move following the recommendations of the Linowes Commission, and he thought, properly so, that he had to move rather dramatically and shift the whole unit rather than just the royalty management function.

This year will be, in part, devoted to sorting out where those responsibilities should go in the long run, and whether the Minerals Management Service should be augmented by other units from the

Survey and other Bureaus of Interior, or whether those functions should be returned to the Survey or another Bureau.

Mr. REGULA. It seems to me, the evaluation of the minerals potential is logically reposed in USGS. That would be part of its fundamental mission.

Would you understand it that way?

Mr. PENDLEY. Well, sir, the term "evaluation" causes me some concern. Delineation of the nature of the resource as a unique occurrence is understanding where resources basically are. When we speak of resources, we are not necessarily talking about resources economically and technologically capable of being brought into production. We are talking about broad areas: yes, this is where coal is, yes; this is where tar sands are.

But with regard to the question: Is this a coal that has sufficiently low overburden, sufficient thickness, sufficient grade without faulting, and so forth, that would make it economically developable? That is an evaluation process that makes it a reserve and really starts throwing it over into the side of the Conservation Division, MMS.

Mr. REGULA. Historically, what has been the practice on that function, USGS or the Conservation Division?

Mr. PENDLEY. It has been the Conservation Division, MMS, with regard to the latter, making the minerals available for the leasing, delineation of what is known as KRCA's, Known Recoverable Coal Areas, Known Geologic Structures, Known Geothermal Areas, and so forth. That has been a Minerals Management-Conservation Division function.

Mr. REGULA. Where are you located?

ADMINISTRATIVE SUPPORT

Mr. PENDLEY. We are located at Reston. Administratively, there is not a split. So there wouldn't be disruption—you know, personnel, desk moving, and so forth—and because we are deep into the budget year, in order to facilitate an operation, we still operate administratively through the USGS administrative arm. We have sessions together and work through Ed Grant, who is the Assistant Director for Administration, to facilitate our activities.

We are separate and distinct, but for administrative purposes we flow through the same unit.

Mr. REGULA. I think we have to be cautious here to be sure we don't get duplication of function.

Mr. PENDLEY. That is one of our high priorities. We meet Director-to-Director on a weekly basis to discuss any questions that are arising that are unresolved, and we have a weekly session with the Under Secretary to bring to his attention any concerns we have in the area.

As you can appreciate in these tight times, we are placing emphasis upon the fact that we don't want to duplicate—we hand things back and forth to insure duplication does not occur.

Mr. REGULA. We are running out of time here. There are a lot of things I would like to pursue because it is a subject of great interest to me.

MOUNT M'KINLEY

Yesterday you apparently had some discussion on Mt. McKinley. I have some interest in that.

Mr. YATES. Mt. Denali?

Mr. REGULA. Mt. McKinley is in Denali National Park.

I was interested. I saw a TV special on Alaska not long ago and I noted that they kept referring to it as McKinley National Park.

My question is: How long will it take, and what will be necessary that you do in order to make that name change that is in the law but apparently has not caught up with the descriptions used by TV producers, among others?

Dr. PECK. Mr. Southard, Chief of the National Mapping Division, is really up to snuff on the subject.

Mr. SOUTHARD. The name change of the park is effective and has been adopted as an official name by the Board on Geographic Names, and by the Secretary.

Mr. REGULA. I understand.

Mr. SOUTHARD. How long it will take TV producers to perceive it as being correct, and final, and official is another matter over which the Board has very little control.

On the question of the naming of the feature itself, the mountain, that is pretty much in the hands of your bill, which is still in committee, I understand, in the Senate.

Mr. REGULA. Correct. So the Board would not take any action so long as that is pending?

Mr. SOUTHARD. The Board has, within the last year, put into regulation a long-standing custom not to take any action on features which are under legislative scrutiny. So long as that bill is still alive, the Board will take no further action.

Mr. REGULA. Take the park as an example, once the Board has made that change—it is, of course, statutory, it was in the Alaska lands bill—as a practical application, does it then fall back to the private sector, cartographers and others, to pick up that change as they redo maps and other information-base material? Does the Board pursue it at all; does USGS take any initiative in trying to get it changed?

Mr. SOUTHARD. USGS would take immediate initiative to change it on the official maps——

Mr. REGULA. I understand.

Mr. SOUTHARD [continuing]. As soon as that could practically and feasibly be done. The Board itself follows it, although not in a policing or enforcing kind of way. They keep the information alive as to how long it seems to be taking for the name change to become effective.

With the publicity this question has had, it probably wouldn't have to be pursued too long. If the decision were taken, chances are it would become effective rather soon.

Mr. REGULA. Well, I was interested that even in the case of the park, for the producers of this recent TV show, it hadn't caught up with them yet. They are referring to it as McKinley National Park rather than Denali, even though officially it is Denali.

NAME CHANGES OF MAJOR LANDMARKS

Do you have under consideration changing of any other major landmarks at this time, such as Mt. Rainier or Mt. Washington or others of that type?

Mr. SOUTHARD. Not that I am aware of, Mr. Regula. The docket lists are presented to us and we generally see them on the Board a month ahead of time. I am not aware of any major changes that are under consideration at this time.

Mr. REGULA. Has most of the interest in Mt. McKinley been generated by people in Alaska?

Mr. SOUTHARD. No. There has been a lot of interest generated in it, of one kind or another, by people from Ohio.

Mr. REGULA. Well, that is true. It is kind of a curious phenomena that we have mountains such as Rainier that I think is named after a Briton and there is no interest in changing that; whereas, one that is named after a President, there is some interest. Do you have any idea why?

Mr. SOUTHARD. Well, although I have been connected with mapping for many years, I have only been connected with the Board on Geographic Names a short time. The Board on Geographic Names usually doesn't reach out to straighten out the whole geographic name situation. It deals with complaints and/or actions that are brought before it under the correct circumstances.

In the case of Mt. McKinley, Denali, that was done in accordance with the regulations. There has been no question raised as yet about Mt. Rainier. If it did, if it were, the Board would deal with it fairly, unemotionally, hopefully.

Mr. YATES. Dispassionately and objectively.

Mr. SOUTHARD. Yes, sir.

Mr. REGULA. I don't know that you would have this information. Have there been any major changes in names of landmarks in the past 10 years to your knowledge?

Mr. SOUTHARD. Well, of course, there was the other one that got an awful lot of public interest at the time of President Kennedy's assassination.

Mr. REGULA. Right.

Mr. SOUTHARD. And the immediate, almost emotional renaming of Cape Canaveral, which was done rather quickly and took a few years to change back to Cape Canaveral.

No others occur to me.

Mr. REGULA. I think they finessed that one by having the Kennedy Space Center as an alternative. But I guess it illustrates that once a name becomes fixed in the minds of the public, as Mt. McKinley or Cape Canaveral or Mt. Washington, it is very difficult to change, and that is even evidenced in the case of the changing of the name of the park.

Mr. SOUTHARD. Yes, sir.

Mr. REGULA. Mr. Chairman.

Mr. YATES [presiding]. If you are finished, I will be glad to take over. I appreciate your coming in.

Mr. REGULA. Thank you.

REPORT ON SLAR EVALUATION

Mr. Yates. Mr. Reporter, let's put into the record the letter from the Geologic Survey dated December 30, 1981, and signed by Dr. Dallas L. Peck, its Director, relating to the acquisition and evaluation of SLAR images. Let's also put in the record another letter signed by Dallas L. Peck, dated March 29, 1982, which provides the current status of SLAR.

[The letters follow:]

United States Department of the Interior

GEOLOGICAL SURVEY
RESTON, VA. 22092

In Reply Refer To:
EGS-Mail Stop 703

DEC 30 1981

Honorable Sidney Yates
Chairman, Subcommittee on Interior
and Related Agencies
Committee on Appropriations
House of Representatives
Washington, D.C. 20515

Dear Mr. Yates:

The U.S. Geological Survey (USGS) has completed a project to acquire and evaluate modern side-looking airborne radar (SLAR) images. The USGS Radar Project began in November 1979 as a result of the House/Senate Conference report on HR 4930 (96th Congress), the Department of the Interior and Related Agencies' Appropriation Bill, 1980, that stated: "$2,000,000 from within available funds should be used to begin the use of side-looking airborne radar imagery for topographic and geological mapping, and geological resource surveys in promising areas, particularly Alaska." In response to this mandate, funds were reprogrammed to acquire modern, commercially available radar data and to begin scientific studies to analyze and evaluate these data. About 70 percent of the total funding was used to acquire data and to evaluate the applications of radar imagery in Alaska.

A seminar on the results of the USGS Radar Project was held in Sioux Falls, South Dakota, on August 12-14, 1981. Results and conclusions of the scientific studies conducted by the USGS, and by Autometric, Inc., and Dr. P. Jan Cannon under contract to the USGS, were presented and are summarized in the enclosed report. A panel discussion on the value of radar imagery for geologic and cartographic applications was held on August 14. Representatives of Congress, universities, industry, and the USGS participated in the discussion and expressed their viewpoints.

The results of these studies and discussions indicate that radar images have a unique incremental value for certain geologic and cartographic applications, but that the images are best suited for use as supplemental information sources or as primary information sources in areas of persistent cloud cover. The value of radar data is greatest for geologic mapping and resource surveys, particularly for mineral and petroleum exploration where the objective is to locate any single geologic feature or group of features that may control the occurrences of these resources. Radar images are considered by oil and gas companies to be worth the cost of data acquisition within a limited area of active exploration.

Radar images also have incremental value for geologic site studies and hazard mapping. The need in these applications is to inventory all geologic hazards to human life, property, resources, and the environment. For other geologic applications, radar images have a relatively small incremental value over a combination of Landsat images and aerial photographs.

The value of radar images for cartographic applications is minimal, except when they are used as a substitute for aerial photographs and topographic maps in persistently cloud-covered areas. If conventional data sources are not available, radar images provide useful information on terrain relief, landforms, drainage patterns, and land cover.

Our analysis of the utility of SLAR data to the mission programs of the USGS indicates that these data have marginal value to our major geologic and cartographic mapping programs. For example, an evaluation of the utility of commercially available SLAR data to our $14M Conterminous States and Alaska Mineral Appraisal Programs was performed with the general conclusion that the SLAR data provided little important additional information to that derived from a combination of available Landsat images and aerial photographs. We recommend that funds provided to the USGS not be used for further large area SLAR data acquisition due to other higher priority requirements for these resources.

In contrast, certain industry representatives have stated that SLAR data are very useful in their petroleum and mineral exploration programs, and have expressed a keen interest in further acquisition of SLAR data by the Federal government. It should be noted, however, that all but the smallest exploration companies are financially capable of purchasing SLAR data directly from commercial vendors. In addition, purchase of new or proprietary radar data enables the exploration companies to protect their privacy concerning areas under active consideration for exploration and development. Industry representatives at the radar seminar expressed little interest in participation in a joint funding venture for SLAR data acquisition due to the requirement to identify areas of interest publicly. We therefore recommend that further acquisition of SLAR data for petroleum and mineral exploration be the responsibility of the exploration companies through direct purchase from commercial vendors.

Representatives of State organizations have also expressed support for a federally financed SLAR acquisition program. It appears, however, that State organizations may not be fully utilizing existing remotely sensed data sets which our studies indicate are generally superior to SLAR for geologic and cartographic applications. For example, State and local government organizations accounted for less than 4 percent of the Landsat and aircraft imagery purchased in fiscal year 1981 from our EROS Data Center (versus approximately 27 percent purchased by the Federal government and 32 percent by industry). We recommend that additional effort be made to inform State organizations of the availability and application of existing data sets; new SLAR data acquisition should be limited to high priority projects with joint funding provided by the benefiting State organizations.

The above recommendations are provided in response to the fiscal year 1980 congressional mandate and subsequent discussions with members of Congress interested in the SLAR technology. We acknowledge that the recently enacted Interior appropriations bill directs the USGS to reprogram fiscal year 1982 funds for the acquisition and use of side-looking airborne radar in areas considered of highest priority by the USGS. In this regard we are moving expeditiously to respond to the new directive and will keep the Congress informed on the status of the program.

Sincerely yours,

Dallas L. Peck

Dallas L. Peck
Director

Enclosure

United States Department of the Interior
GEOLOGICAL SURVEY
RESTON, VA. 22092

In Reply Refer To:
EGS-Mail Stop 730

[illegible] 1982

Honorable Sidney R. Yates
Chairman, Subcommittee on Interior
and Related Agencies
Committee on Appropriations
House of Representatives
Washington, D.C. 20515

Dear Mr. Yates:

We would like to take this opportunity to provide to the Subcommittee a summary of the current status of the U.S. Geological Survey's Side Looking Airborne Radar (SLAR) program for fiscal year 1982.

Presently, we are involved in the process of: 1) determining site selection for data acquisition in project areas with either high-potential for energy and mineral resources or lacking up-to-date maps due to persistent inclement weather; and 2) preparing technical specifications to assure that the highest quality data are acquired for entry into the public domain. As a part of the site selection process, we have requested the State Geologists to help us in identifying and prioritizing areas to be flown. We anticipate that a solicitation for proposals on a competitive basis will be issued this month and that the contract(s) for data acquisition will be awarded during July of this year. This schedule will allow the contractor(s) to begin data acquisition this summer in those areas where winter flying is impractical.

The House/Senate conference report (H.R. 4035, No. 97-315) on the Fiscal Year 1982 Interior Appropriations legislation requested specific information regarding three items, the first of which was:

> "...which of the two commercially available technologies is used to collect data in each project initiated by the Survey,...."

Vendors of real- and synthetic-aperture technologies will be requested to submit competitive proposals on the identified project areas. However, technical specifications (enlargement capability, depression angle, scheduling, and others) determined critical or necessary by Survey scientists or State Geologists may limit the ability of a potential contractor to meet individual requirements for a specific project area.

The second item requested in the conference report was:

> "...in what areas such data will be collected...."

Survey scientists have identified a number of potential geographic areas where SLAR data could be used beneficially by both the public and private sectors. However, our current discussions with State Geologists may lead us to reprioritize some of these tentative selections in response to public need. Areas currently being considered are:

Aleutian Islands Site - This volcanic island arc is largely unexplored and may have mineral potential as well as major potential for oil and gas in adjacent areas where offshore lease sales are now planned. In addition, major earthquakes in this area could affect southern Alaska by ground motion as well as the whole west coast of North America by wave action (tsunami). Unfortunately, the only available maps of the area were published in the 1940's and 1950's and are classified as reconnaissance editions in recognition of the technology prevalent at that time. The Survey is currently attempting to acquire aerial photography to prepare modern topographic maps, but is hindered by the almost continuous cloud cover, fog, and the remoteness of the area. SLAR could provide a near-term source material that would enable the Survey to quickly publish controlled image maps of the Aleutians to aid in any exploration activities.

Tonopah, Nevada Site - This site is currently being evaluated for mineral resource potential under the Survey's Conterminous United States Mineral Assessment Program. The area is structurally complex and most of the mineralization is controlled by structure. Radar images may help to better define East-trending lineaments that have been identified on Landsat images and confirmed by field work.

Central Appalachians Site - This area includes parts of Virginia, Maryland, West Virginia, and Pennsylvania. SLAR data would be particularly useful in this heavily vegetated area for hazards mapping and energy exploration. This proposed acquisition is adjacent to an existing SLAR data set, and could enhance our understanding of large scale regional features.

New England Site - This area includes parts of Maine, Vermont, New Hampshire, and New York. It has an extremely complex geologic structure covered by heavy vegetation. The radar data would be used to aid in delineating potential mineralization in this area. This is a particularly promising area because of the recent discovery of a potential copper deposit.

The third item requested in the conference report was:

> "...the programs from which funds will be derived...."

The funding for SLAR is derived from a prorated assessment of each major budget activity within the Survey, each contributing a share based on its percentage of the total Bureau appropriation. It is important to note that subsequent to the November 5 requirement to reprogram $3,000,000, the Department of the Interior budget was reduced by 4 percent and we were mandated, "...That such reductions shall be ratably applied to each account, program, activity and project." (Congressional Record-House H-9156, December 10, 1981.) Consequently, the SLAR Program has been reduced by 4 percent to $2,880,000.

To assure that the committee members are informed of the status of this program, we plan to submit additional status reports on the following schedule:

Date of Status Report	Contents of Report
May 15, 1982	Acquisition sites and technical specifications cited in request for proposals.
July 31, 1982	Information regarding award of contract to the successful vendor(s), costs, and schedule for delivery of data.
October 31, 1982	End of year report, including status of contracts, amount of imagery acquired, and nature of data analyses underway.

Should you require any additional information concerning our SLAR effort, I would be pleased to arrange for a briefing by appropriate Survey personnel at your convenience.

Sincerely yours,

Dallas L. Peck
Director

COAL EXPLORATION

Mr. **Yates**. On page 104 of the justifications you talk about activities for coal exploration. Is this how an inventory would be done under the wilderness program proposed by the Secretary?

Dr. **Peck**. Most of the focus is on hard minerals because most of the wilderness areas are areas of granite and that sort of thing. So, in most wilderness areas, coal is not a resource.

In the areas where coal is a resource, by and large we would assemble the existing data based on holes we drilled earlier, or water wells. Whether under the wilderness program we do any coal drilling, I am not sure.

This is Mr. Don Grybeck, Deputy Chief of the Office of Mineral Resources, that carries out the wilderness program.

Mr. **Grybeck**. Generally, most of the areas studied to date have not had extensive coal or petroleum resources. If we go into the BLM program in a large way, some of those do have extensive coal and petroleum resources. Normally we would not drill those areas.

Now the mineral surveys in wilderness areas are done in conjunction with the Bureau of Mines. I would assume if drilling were done that they would probably do it. In any event, I doubt if there would be extensive drilling. It is a monetary problem as much as anything.

Mr. **Frederick**. If I may, Mr. Chairman, just one general comment on that.

The mineral appraisal program we are involved in at the moment is mostly a reconnaissance survey. It involves the collection of aeromagnetic data, aerial photography and other remote sensing information as an initial starting point, the collection of existing information that may have been available earlier, and that sort of thing.

In addition to that, our people do set foot on the ground in the area primarily to collect stream sampling information and that sort of thing, geologic mapping, as required. So basically, it is a reconnaissance survey that does require access to the area but doesn't impact significantly, in our opinion, the wilderness characteristics of an area.

NATIONAL COAL RESOURCE DATA SYSTEM

Mr. **Yates**. There has been a substantial reconfiguration of program allocations between the national coal resource data system program and regional geology of coal development program. Why is the shift occurring?

Dr. **Peck**. Because of a perception of an increasing need to load coal data into the data banks so that we can use it, as can the Minerals Management Service, Bureau of Land Management and the many State organizations. We have a cooperative program with about a dozen States. Both of us are adding resources to get the information into the data bank.

Mr. **Yates**. Why couldn't the shift have taken place between the regional geology program and coal resource program? It could have, couldn't it?

Dr. **Peck**. Yes. Perhaps I will ask the Chief Geologist, Dr. Hamilton, to speak to this.

Mr. YATES. Dr. Hamilton.

Dr. HAMILTON. Well, Mr. Chairman, in the President's budget we are proposing to move $1.6 million out of the regional studies into the national coal resource data system. Then we have an increase of $1.5 million in coal resource investigations. The regional geologic studies have been focused primarily on engineering aspects of coal land development and some of the more regional features.

We felt that with the advent of coal resource data system that we should move ahead with putting the data into that system so that it could be used. So this really reflects a judgment on our part that we should move toward carrying out the data system.

Mr. YATES. How many of the 11 positions which relate to the increase are coming from the existing GS programs that are being cut back?

Dr. HAMILTON. Virtually all of those would come from shifting people from declining programs to this increasing program.

ONSHORE OIL AND GAS INVESTIGATIONS

Mr. YATES. On page 109 you talk about onshore oil and gas investigations program. The dollar amounts are the same, but the outputs vary.

Why are the outputs being reduced?

Dr. PECK. In part, this reflects—this program has been maintained at the same level for the last 7 or 8 years. It is continually subject to the ravages of inflation.

OIL SHALE PROGRAM

Mr. YATES. Well, you are also reducing the oil shale investigations program. Which are the most critical aspects of the oil shale distribution program?

Dr. PECK. Well, the critical aspects are doing the geologic mapping; doing drilling, because much of the oil shale is buried; doing the analysis of the samples, both as far as its petroleum content, and as far as minor elements.

Mr. YATES. Does this mean that the oil shale investigations program is going to be terminated?

Dr. PECK. No, but——

Mr. YATES. You are cutting it back $1.5 million.

Dr. PECK. Yes. It is cut back to the level it was just 1 or 2 years ago. It just had an increase, then it has been cut back.

Mr. YATES. Does that mean next year it goes up again, or will you reduce it further?

Dr. PECK. No, I think it will stay level, although we haven't faced up to looking at the fiscal year 1984 budget.

Mr. YATES. Deliberately?

Dr. PECK. That comes tomorrow.

Mr. YATES. Does it really?

Dr. PECK. Yes. The books were delivered to me this morning, with all the happy news.

The oil shale program can be strung out for some years probably, and there is a lot of data available on the most prospective areas for leasing. We are working in areas that, primarily, won't be leased for some time, anyway.

Mr. **Yates**. Does the amount available for completion of the 8 folios assume a level of roughly $2,300,000 a year, or does it assume $813,000 a year, as you are requesting.

Dr. **Peck**. Dr. Hamilton.

Dr. **Hamilton**. We have the 8 folios at a scale of 1 to 100,000, and the budget justification says those will be completed through fiscal year 1982.

Mr. **Yates**. So that is for $2.3 million, then?

Dr. **Hamilton**. That would be at the reduced level.

Mr. **Yates**. $813,000?

Dr. **Hamilton**. Yes.

Mr. **Yates**. Well, how long is it going to take to accomplish the goals for Colorado, Wyoming and Utah at that level?

Dr. **Hamilton**. I can't give you an extended projection of that program, but it would, at the reduced level, definitely extend the deadlines on those works.

The main impact of the cuts here will be to reduce core drilling, and to reduce the mapping in the field. So we definitely are proposing to extend the schedule.

Mr. **Yates**. What you are saying is there is a relationship between the amount available and the time when the mapping is completed.

Dr. **Hamilton**. That is right.

Dr. **Peck**. It is about a 3-year delay, I think.

Mr. **Yates**. Suppose next year you get another $813,000. Will it be extended?

Dr. **Peck**. You mean a cut or an increase? If it is a cut, I think productivity will be affected.

Mr. **Yates**. How important is this activity?

Dr. **Peck**. I think that the oil shale does represent a resource that will be needed by the Nation in the long run, but the scheduled utilization of that resource seems to be extended with the present economy and supply of oil and gas.

Mr. **Yates**. It is not very important, then?

Dr. **Peck**. Yes, I think it very important in the long run; but its economic viability doesn't look as promising today as it did a year ago.

Mr. **Pendley**. If I might add a comment, this is not a view simply in the Government, but is shared by the private sector. Recently a number of private companies have pulled back on the oil shale business and cut back considerably on the activities because of the glut on the market and because of the increasing cost of developing that product.

Mr. **Yates**. Does that thesis assume that the glut will continue?

Mr. **Pendley**. No. But what the Geological Survey is involved in is the delineation of prospective areas. We have a large portion of areas that have already been designated as potential oil shale areas that we can offer up for leases. We are working with BLM, at the present time, to offer up those areas for lease for prototypes next year and for full-scale leases, if the interest merits it, the year after that. So we have lands that can be made available for that leasing activity.

URANIUM/THORIUM INVESTIGATIONS

Mr. **Yates**. Why not eliminate your uranium/thorium investigations inasmuch as it is being reduced so significantly?

Dr. **Peck**. I think it is very important to continue those investigations.

Mr. **Yates**. Why are you cutting them by $4,800,000, then?

Dr. **Peck**. Well, in these constrained times, this seems to represent——

Mr. **Yates**. You are streamlining the program?

Dr. **Peck**. No, I have avoided the use of that term. At the present, it is in somewhat the same situation as the oil shale. The outlook for use of uranium in generating plants has decreased considerably the last few years. The price of uranium has dropped; mines are closed.

In the long run, we are going to need uranium the same way we need oil shale. It is important to continue some studies, particularly building on the vast amount of information gathered by the Department of Energy and its national uranium resource evaluation program, to get a better insight on the occurrence of uranium, so when demand swings up again, we will have identified prospective areas and have a better understanding of the origin.

Mr. **Yates**. Well, suppose the Department of Energy is continued? Will that investigation take on higher priority?

Dr. **Peck**. A lot depends on what elements——

Mr. **Yates**. What happens if you don't collect that scientific data?

Dr. **Peck**. Then 20 years from now, or 15 years from now, when all of a sudden we are in a crash program again, we will be no better off, and not know any more than we knew when we started the last crash program. It is advantageous to continue studies to develop better understanding of the occurrence that can guide exploration, and do that well in advance of the critical need.

Mr. **Yates**. Okay.

Dr. **Hamilton**. Mr. Chairman, could I add one point?

Mr. **Yates**. You may, indeed.

Dr. **Hamilton**. Under the NURE program, national uranium resource evaluation program that the Department of Energy conducted, they gathered a very large amount of data. That data has not all been completely analyzed. We feel that one of the reasons for continuing the uranium/thorium program at this base level would be to make sure that that data is brought into a form where it can be preserved and where analysis can continue.

Mr. **Yates**. On page 115 of your justification you say there will be no further work on evaluating the scientific data collected by the now terminated Department of Energy national uranium resource evaluation program.

Dr. **Hamilton**. That perhaps is an overstatement. The program still will be funded at about a $2 million level. This should permit continued evaluation at that level.

Mr. **Yates**. Should you save the $2 million?

Dr. **Peck**. I think it is very important to continue this program. I think over the last year, there has been a good deal of uncertainty in just what the Department of Energy's program was going to do, with decisions fluctuating back and forth.

At the present time, my understanding is that that program will be very drastically reduced, but that a small program will continue, which is very important, because they have a lot of data, uranium reserve data as well as the geochemical sampling.

COSO VOLCANIC FIELD

Mr. **YATES**. Would you furnish the committee with a copy of a geologic map for the Coso volcanic field?

Dr. **PECK**. Yes.

[**COMMITTEE NOTE**.—The map was provided, and will be retained in the committee files.]

GEOTHERMAL INVESTIGATIONS

Mr. **YATES**. What are some of the higher priority program thrusts for the geothermal investigations program?

Dr. **PECK**. There are two areas of major focus in the program. One is a continuation——

Mr. **YATES**. You are cutting back all your studies. Is all this attributed to the oil glut?

Dr. **PECK**. Part of it is the oil glut. Part is the focus on programs like coal, which are of shorter payoff; part is a changing of priorities by the Administration; more emphasis on programs like the strategic minerals program and the leasing and royalty accounting function.

Mr. **YATES**. How long are you going to delay assessment of the geothermal potential of the Cascades?

Dr. **PECK**. It is going to be stretched. It is in progress.

Mr. **YATES**. It is going to be stretched, but will it snap?

Dr. **PECK**. No.

Mr. **PENDLEY**. Mr. Chairman, if I might interject——

Mr. **YATES**. You may, indeed.

Mr. **PENDLEY**. Thank you, sir.

Geothermal development right now is handicapped, not by lack of research activities on the part of the USGS, but by the need for additional legislation to increase the acreage available to the private sector for geothermal development.

INDUSTRY INTEREST IN GEOTHERMAL

We have, right now, a situation where these industries who are ready and willing to develop geothermal industry, cannot obtain additional leases for that development as a result of a ceiling that was imposed back in 1970 when we were dealing prospectively with this energy resource.

We estimate that we will lose between $40 million and $60 million in lease applications and bonuses as a result of this event. Really, what we need to insure the development of the geothermal resource is, in fact, this new legislation that is now before the Congress.

But we do not anticipate that this minor cutback in the evaluation of very, very prospective areas of geothermal potential will hurt this program. We think geothermal will move ahead under our aggressive program with regard to the processing of these leases and permits for——

Mr. YATES. Suppose you don't have the leases? Should the studies be continued?

Mr. PENDLEY. The private sector is very willing to go out there. They know where those hot spots are. They are willing and able to apply for leases, non-competitive leases. One of the problems in the past has been a failure to process those lease applications. We have a tremendous backlog of lease applications. It is not a lack of information with regard to where the potential is.

What GS is doing, as I understand it, is looking far into the future with regard to particular areas. The companies are ready and willing to go out and obtain leases on areas they know have potential. They are now handicapped by administrative processing problems and by a legislative ceiling that they cannot overcome.

Mr. YATES. Studies of geothermal resources of the Gulf Coast region, are going to be eliminated; right?

Dr. PECK. Yes, sir.

Mr. YATES. Does that mean that such studies are not of value?

Dr. PECK. Again, that is a resource whose economic viability is seriously in question, the problem being largely disposal of the highly saline brines. Our program was paired with the Department of Energy program involving drilling along the Gulf Coast. Their program is being terminated also.

WORLD ENERGY RESOURCE ASSESSMENT

Mr. YATES. The CIA and State Department say you should continue the world energy resource assessment program. You are terminating your part of it, aren't you?

Dr. PECK. Unfortunately, much of their expression of interest came after the decision was made by the Department to terminate that program. They have encouraged us—actually it was an OMB decision. We are hoping we can work with them over the next year to gather other sources of funding to continue what I regard as a very important program, and we will be giving serious consideration in the fiscal year 1984 exercise to refunding that program.

Mr. YATES. Well, it is kind of interesting. Here is a letter addressed to the Secretary signed by William J. Casey. He needs the money. He wants the program. And Jim says budget constraints are holding it back. "Unfortunately, it is late in our budget process, and if we were to continue the program for 1983, it may be necessary to explore, with your help, the possibility of financial assistance from other agencies."

What does that mean?

Dr. PECK. It means exploring with the State Department——

Mr. YATES. You mean they hire you to continue to do it? They would pay for it?

Dr. PECK. Part of an effort be funded by transfer of funds.

Mr. YATES. How important is the program?

Dr. PECK. I think it is important for the Nation to have a good understanding of petroleum resources of the world, since we are dependent, to quite a fair degree, on imports of petroleum from overseas and will be to an increasing level in the future.

Mr. YATES. Well, should the committee give you the $1 million? If you were on this side of the table, would you give the program $1 million?

Here, but for the grace of God, sits you.

Dr. PECK. Perhaps I should ask——

Mr. YATES. Here the Director of the CIA comes along and says, "My goodness, this is an important program. We learn about the oil in China, oil in Russia," and so forth.

Dr. PECK. Yes, I think it is very important. Perhaps I should turn to the Deputy Assistant Secretary for Energy and Minerals, who may care to express——

Mr. PENDLEY. Mr. Chairman, as I recall the letter from the Director of the CIA, it is his intention to join with us in finding new avenues whereby they might join in taking care of part of the cost. I think it might be premature for the committee, at this time, if I might suggest it, to place the money back in. Perhaps if we fail in our efforts to do it within the Administration, and to insure that those agencies which derive a benefit from the program participate in the program, if that exercise should fail, then perhaps we might discuss the issue again.

Mr. YATES. Here is Mr. Casey's letter. You find in there where he says he is going to find some money somewhere else.

Mr. PENDLEY. I recall the letter.

Mr. YATES. I think that is the Secretary's letter to Mr. Casey that you recall.

Mr. PENDLEY. Maybe so.

Mr. YATES. Mr. Watt doesn't want to finance it. Mr. Casey wants it financed.

Dr. PECK. I think there has been some further correspondence. We have been asked to—Mr. Casey suggested that we, Interior and Geological Survey, take the lead in setting up some coordination with the State Department——

Mr. PENDLEY. Right.

Dr. PECK [continuing]. And other concerned agencies.

Mr. YATES. Yes.

Dr. PECK. We are hopeful that through that exercise, other areas of support will be elicited.

Mr. PENDLEY. We join in similar programs, as you know, Mr. Chairman, with the State Department whereby they provide funds to the USGS to engage in activities that are to their benefit.

Mr. YATES. Does that mean that the State Department isn't subject to the same budgetary constraints that the Interior Department is?

Mr. PENDLEY. Well, it is their suggestion that it is an important program, Mr. Chairman. If that is their reading of the subject, perhaps they will be willing to come forward with some assistance.

Mr. YATES. I see. Does that mean it isn't your reading of the subject?

Mr. PENDLEY. In our priorities in the Department, we believe it does not rise to the level——

Mr. YATES. You are interior and not foreign, is what you are saying.

Mr. PENDLEY. Yes. That is correct, Mr. Chairman.

Mr. YATES. You are aware of the fact the Department requested the money from OMB?

Mr. PENDLEY. Yes, Mr. Chairman.

Mr. YATES. So you thought it was a priority object?

Mr. PENDLEY. With the spread of money we had at that time, it was our reading that that would be an important program. When we got the final figures, we said, "Okay, with these final figures, what is important now?"

Mr. YATES. Let's put the letters bearing on the subject into the record, Mr. Casey's letter, Mr. Watt's letter, Mr. Gingrich's letter, a letter from Mr. Spiers of the State Department, Director of Intelligence and Research—he thinks it is important—and the Department of the Interior's response to that letter.

[The letters follow:]

THE DIRECTOR OF CENTRAL INTELLIGENCE,
Washington D.C. January 12, 1982.

Hon. JAMES G. WATT,
Secretary of the Interior,
Washington, D.C.

DEAR JIM: I am writing to call your attention to the World Energy Program, a relatively new effort at the US Geological Survey that has been of great help to the Agency over the past few years. We recently learned that this program might not be funded by your department in fiscal year 1983. Basic geologic research on Soviet and Chinese petroleum and on Soviet uranium by USGS plays an important role in supporting our estimates of the energy outlook for those countries. Loss of this support will hurt CIA's research effort.

Since its inception, the World Energy Program has been a steady contributor to our analysis of Soviet oil prospects. More recently, the program has shown promise of assisting us in a similar way with our work on Chinese oil and Soviet uranium. As you are well aware, these research areas reflect key intelligence issues of keen national security concern. The contribution from USGS is now more important than ever. Increasingly, the Soviets—as well as other countries—have limited our access to data that would allow CIA to make accurate estimates of their energy supplies. To fill the gap, our analysts have designed estimative methodologies that depend on detailed geologic and engineering assessments for their validity. In this process, CIA has looked to your World Energy Program for a significant portion of the basic geologic data and associated analysis needed to make its estimates.

Consequently, we believe the USGS World Energy Program—and, in particular, its research on Soviet and Chinese energy sources—is an important effort that needs to continue. That such research is performed at USGS only increases its worth in terms of quality and professional acceptance, and we are convinced this contribution would be difficult to replace.

Yours,

WILLIAM J. CASEY.

U.S. DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D.C., March 3, 1982.

Hon. WILLIAM J. CASEY,
Director, Central Intelligence Agency,
Washington, D.C.

DEAR MR. CASEY: Thank you for your letter commenting on the World Energy Resources Program of the U.S. Geological Survey and your expression of support for the basic geologic research and associated analyses. We are always gratified to learn of the positive use of our program efforts and value the realization that effective program coordination is taking place between executive branch agencies.

It is true that we have been unable to fund the World Energy Resources Program in the face of budget constraints and other mandated programs of the Department of the Interior. We are aware, however from earlier correspondence, of the significance that you attach to our program. Unfortunately, it is late in our budget process, and if we are to continue the program for fiscal year 1983, it may be necessary to explore, with your help, the possibility of financial assistance from other agencies.

If there is to be program continuity of an interagency nature, then there must as well be a cooperative budgetary policy to support such program activities. Any program activity must be managed and funded by the Geological Survey at a level consistent with our own scientific and resource interests. To the extent that other agency interests are identical to our own, coordination can be effected without consideration of reimbursement. To the extent, however, that program expansion is required to serve the special interests of other agencies, then some form of reimbursable mechanism would be appropriate.

In addition, we would like to ensure, for the future, that our coordination is sufficient at appropriate levels with each of the involved agencies to gain maximum program effectiveness.

Accordingly, if you so desire, you may wish to develop parameters that will aid us in designing the program to serve better the full range of needs of Government. We appreciate that informal program ties already exist, but considering the importance of this program to your Agency and to the Nation, we think a more formal mechanism may be warranted.

Thank you, Bill, for calling our attention to this issue. We apologize for the delay in responding to you and trust that we can work out satisfactory program and budgetary relations.

Sincerely,

JAMES G. WATT.

THE DIRECTOR OF CENTRAL INTELLIGENCE,
Washington, D.C., March 22, 1982.

Hon. JAMES G. WATT,
Secretary of the Interior,
Washington, D.C.

DEAR JIM: Thank you for your response to my recent letter urging the continuation of the World Energy Program of the US Geological Survey. I am pleased to learn that you share many of my concerns about the future of this valuable effort.

As we both know too well, funds are tight throughout the government this year. CIA, as in past years, has an extremely limited amount of moneys available for external research. We will, of course, continue to lend active support to efforts before OMB and Congress by USGS to provide permanent funding for the World Energy Program. In addition, I have asked Jim Lynch, who heads our Office of Global Issues, to explore with USGS other ways in which we might assist the program for fiscal year 1983.

In the longer run, I believe your suggestion on an interagency coordinating mechanism for the World Energy Program research agenda might offer the best way to keep the program going. Obviously, a number of other agencies—State, DoD, and Commerce—in addition to CIA, benefit from portions of the program. If USGS were to form such a coordinating committee, we would be happy to provide a CIA representative.

Yours,

WILLIAM J. CASEY.

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, D.C., March 23, 1982.

Hon. SIDNEY R. YATES III,
Chairman, Subcommittee on Interior,
Rayburn House Office Building.

DEAR SIDNEY: As you know, issues of national security and military preparedness are of great concern to me. I have dedicated much of my effort in Congress to highlighting those issues and trying to develop a U.S. government posture that would permit rational analysis of our defense situation and planning for our military needs. In this regard a program in the U.S. Geological Survey on World Energy Resources has impressed me as providing important elements for strategic analysis.

I am aware from correspondence I have seen that the CIA and the State Department have been similarly impressed with the program. Unfortunately the Department of the Interior does not hold the program in high regard and the program risks recision in fiscal year 1983.

I appreciate that fiscal year 1983 will be a difficult budget year but I believe that this program has demonstrated merit and through time will become of increasing value to the government as the USGS increases its level of sophistication in the understanding of world energy resources. At this time, the program concerns itself solely with oil and gas but clearly other energy resources will have to be involved in the future.

World stability rests in no small part on energy distribution and availability. The U.S. government must have clear analysis with which to establish domestic and international policy. The U.S. Geological Survey on World Energy Resources provides that analysis. It should be funded in fiscal year 1983.

Sincerely,

NEWT GINGRICH.

DEPARTMENT OF STATE,
DIRECTOR OF INTELLIGENCE AND RESEARCH,
Washington, D.C., June 8, 1981.

Mr. DONALD P. HODEL,
Under Secretary, Department of the Interior,
Washington, D.C. 20240

DEAR MR. HODEL: In the past the U.S. Geological Survey has provided the Bureau of Intelligence and Research with a wide variety of valuable information pertaining to the formulation of U.S. foreign policy and the better understanding of that of other nations. The Survey's input has been most helpful, for example, in the difficult problems of U.S. maritime boundary negotiations, the storage of spent nuclear fuel, consideration of the mineral potentials of the Polar regions and the deep ocean floor, and assessments of the potential for petroleum resources in many other parts of the world.

As there is every indication that future U.S. foreign policy questions increasingly will involve earth resource scarcities, we would like to encourage the Department of the Interior to maintain the international program activities of the USGS. In order to help the Survey continue meeting the needs of this Bureau, we would welcome the opportunity to assist in the future orientation of the international program on a regular, or as-needed basis. Given the unique pool of talent and knowledge stored in the USGS, and its potential contributions to U.S. foreign policy questions, we hope that continued support can be given to its international activities.

Sincerely yours,

RONALD I. SPIERS.

U.S. DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SECRETARY,
Washington, D.C., July 8, 1981.

Mr. RONALD I. SPIERS,
Director of Intelligence and Research,
Department of State, Washington, D.C.

DEAR MR. SPIERS: Thank you for your letter of June 8, 1981, to Under Secretary Hodel. We are pleased to learn that information resulting from the international activities of the U.S. Geological Survey (USGS) has been helpful to the Bureau of Intelligence and Research, and we appreciate your views concerning the importance of maintaining the Survey's international program.

As a domestic agency, the USGS is, of course, primarily responsible for the investigation and appraisal of resources within the United States and its territories. For this reason, we evaluate international activities of the USGS primarily on the basis of their contribution to the USGS domestic program objectives. Nevertheless, we recognize that these activities can be helpful also to the Department of State, and we assure you that we will keep the interests of the Bureau of Intelligence and Research and other Bureaus of the Department of State in mind in organizing the future international activities of the USGS. We would welcome a mechanism for periodic consultations with you and your staff in the orientation of USGS international activities.

As you may know, a study of the USGS international role in relation to foreign policy objectives was completed last year, jointly by the Department of State and the USGS. This resulted in a report titled "The International Role of the U.S. Geological Survey," and a set of Policy Recommendations (copy enclosed) drafted jointly by the Bureau of Oceans and International Environmental and Scientific Affairs and the USGS. No action has been taken on these recommendations, but it may be useful to consider them in relation to the interests expressed in your letter.

We are contacting the Assistant Secretary of State for Oceans and International Environmental and Scientific Affairs to consider action on the recommendations and to establish a mechanism for regular consultation on the development of USGS international activities. If you agree, perhaps consultation with the Bureau of Intelligence and Research could be a part of the same mechanism.

Sincerely yours,

DAVID M. MILLER, Jr.,
Assistant Secretary
for Energy and Minerals.

Enclosures.

ASSISTANT SECRETARY OF STATE,
OCEANS AND INTERNATIONAL ENVIRONMENTAL AND SCIENTIFIC AFFAIRS,
Washington, D.C., June 8, 1981.

Mr. DONALD P. HODEL,
Under Secretary,
Department of the Interior, Washington, D.C.

DEAR MR. HODEL: The U.S. Geological Survey has worked closely with the Bureau of Oceans and International Environmental and Scientific Affairs on a number of occasions in the past. USGS assistance has been particularly useful in the determination of policies regarding marine scientific research, the Arctic and Antarctic, and the election of marine boundary negotiating options, particularly in the Bering, Beaufort and Chukchi Seas, the Caribbean and Gulf of Mexico, and concerning the region around Georges Bank. In addition, the Survey has helped this Bureau in our search for possible solutions to problems of nuclear non-proliferation.

As the repository for the majority of earth science and resource expertise within the Federal establishment, the Survey provides invaluable advice and assistance on problems that are increasingly important issues in U.S. foreign policy. For this reason, we hope that the Department of the Interior will continue to support the international program activities of the Survey. We in our Department would welcome the opportunity to participate in the planning of USGS international activities on a periodic basis and would be most happy to assist in the further development of this program should you so desire.

Sincerely yours,

JAMES L. MALONE.

Mr. PENDLEY. We have increased toxic waste, Mr. Chairman, and acid rain research.

Dr. PECK. And royalty accounting.

Mr. PENDLEY. Thank you.

Mr. YATES. But with all the extra money coming in, shouldn't you be able to find a million dollars for a priority program?

Mr. PENDLEY. I understand Interior has already spent that money, Mr. Chairman.

Mr. YATES. How can they spend it without our okay?

LEASING OFF NORTHERN CALIFORNIA

On page 128 of the justifications, you indicate the surveys following a magnitude 7 earthquake off northern California indicate substantial changes in the sea floor; right?

Dr. PECK. There are some changes in the sea floor, yes.

Mr. YATES. Isn't that where you are going to lease?

Dr. HAMILTON. This area, Mr. Chairman, is located off Eureka in northern California where a magnitude 7.2 earthquake occurred in 1980.

Mr. **Yates**. Then the action of the committee in stopping you from leasing in that area was very well based; right?

Dr. **Hamilton**. Well, just because there was an earthquake there doesn't necessarily mean that one couldn't undertake certain types of development in the area.

Mr. **Yates**. What would happen if there were another earthquake and you had your drillings there?

Dr. **Hamilton**. If the facilities were properly designed, and if the foundation materials were solid——

Mr. **Yates**. Wouldn't you have to worry about a break in the surface there?

Dr. **Hamilton**. Not necessarily. The nature of the ground deformation was slumping of unconsolidated material. This reached a total of about 12 feet across a zone that was about 13 miles long. Now, if the appropriate engineering work had been done ahead of time, which is expected under the leasing program, then one probably could design facilities that would substantially reduce the risk.

Mr. **Yates**. Who is going to do that engineering study?

Dr. **Hamilton**. Well, under the leasing program, under the accelerated leasing program, after the tracts are leased, then a detailed study has to be done to determine the engineering characteristics. Then it would be up to the companies to design——

Dr. **Peck**. Stipulations would be applied to the lease.

Mr. **Yates**. Would you be doing those studies?

Dr. **Peck**. No. Private industry.

Mr. **Yates**. Yes; that is my understanding. What role do you play in this, then?

Mr. **Pendley**. Mr. Chairman, the precise role is this: We would require close-line, high-resolution data to be collected with regard to the tract. Based upon the regional data that is collected by the geologic division, and based, as well, on the topical studies they have done with regard to geologic hazards in general, we would apply that information to make an assessment as to whether or not we needed additional information, off tract, with regard to the potential geohazard.

We would require that additional information be collected and presented to us. It is collected by seismic companies and not by the particular industry. They contract out just as we would contract out. We would collect that information, and then we would have our engineers in the MMS do the study of the proposed engineering mitigation measures, the way the company proposes to mitigate around that potential hazard.

We would run that through our engineers and our experts who are exposed to the expertise of the USGS and make a determination as to whether there were sufficient safeguards taken to prevent any danger.

MARINE GEOLOGY INVESTIGATIONS

Mr. **Yates**. For marine geology investigations you want $1,439,000. This is the program under which you identified the sulfide deposits offshore in the Juan de Fuca Ridge. Suppose the committee made available an extra $500,000? Could you make additional assessments of comparable areas?

Dr. **Peck**. Yes, although I am constrained, I believe, by Mr. Stockman, in the fullness of my answer, Mr. Chairman.

Mr. **Yates**. I am not sure I understand that addendum to your initial reply. What you are saying is Stockman wouldn't like that answer; right?

Dr. **Peck**. He certainly wouldn't want me to expand on it.

Mr. **Yates**. All right. What if the committee wanted you to expand on it? Mr. Stockman isn't here, or is he? Is his spirit hovering over this table?

Dr. **Peck**. If I am asked a direct question, I can answer it.

Mr. **Yates**. Okay. That was a rather direct question.

Dr. **Peck**. I am sort of the new boy on the beat.

Mr. **Yates**. Well, I hope you stay the new boy on the beat. As far as I am concerned, you can.

Dr. **Hamilton**. Mr. Chairman.

Mr. **Yates**. Yes?

Dr. **Hamilton**. Could I toss something in?

Mr. **Yates**. Please do.

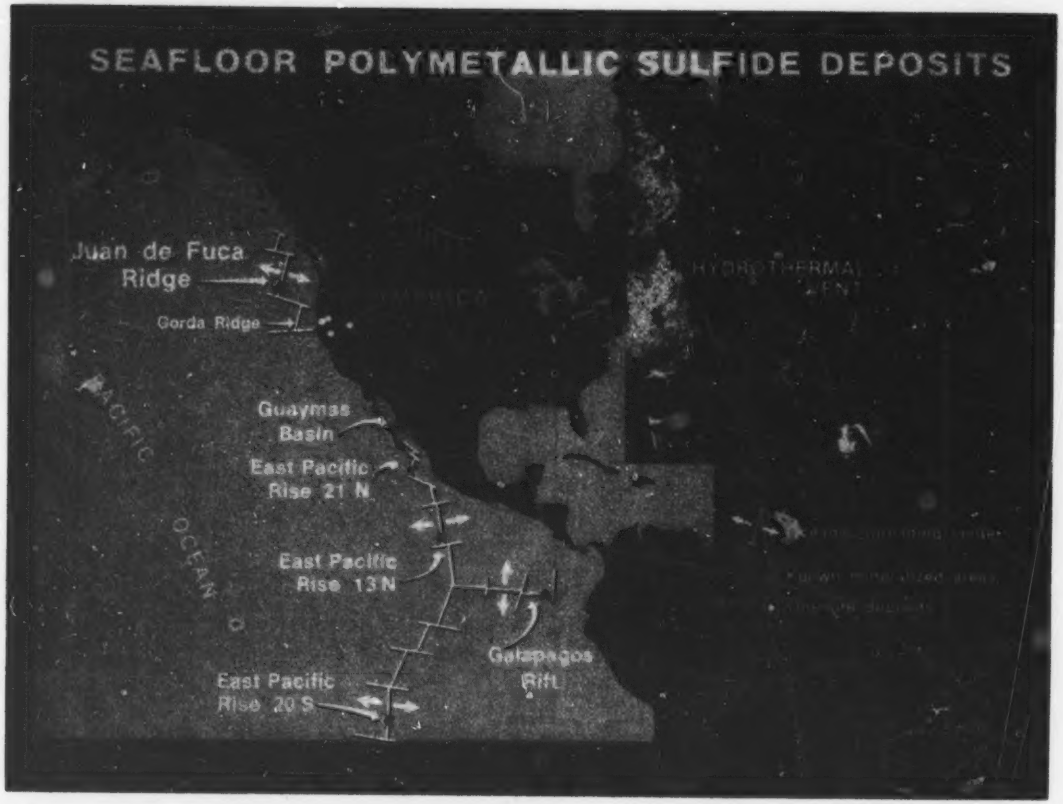
POLYMETALLIC SULFIDE DEPOSITS

Dr. **Hamilton**. I would like to mention that the discovery of these polymetallic sulfide deposits on the ocean floor has been one of the most exciting discoveries in recent years.

Mr. **Yates**. That is why I asked the question.

Dr. **Hamilton**. We just happen to have a chart on the subject.

[The chart follows:]


SEAFLOOR POLYMETALLIC SULFIDE DEPOSITS
Juan de Fuca Ridge
Gorda Ridge
PACIFIC OCEAN
Guaymas Basin
East Pacific Rise 21 N
East Pacific Rise 13 N
Galapagos Rift
East Pacific Rise 20 S
HYDROTHERMAL VENT

Polymetallic sulfide deposits in deep ocean areas.

Dr. HAMILTON. The original discovery of these deposits was, I believe, made by the French, but they did not really realize what they had until some of our people happened to look at their specimens.

Mr. YATES. How valuable is it?

Dr. PECK. Very extensive deposits.

Mr. YATES. How valuable are they?

Dr. PECK. Billions of dollars.

Mr. YATES. And you can't reply to a question for $500,000?

Dr. PECK. Actually, I did reply briefly.

Mr. YATES. Okay.

Dr. PECK. Whether they are economically recoverable at this stage is unknown. They haven't been drilled. We don't know the thickness——

Mr. YATES. Have you got enough money to investigate that possibility?

Dr. PECK. Not very fully, sir.

Mr. YATES. Shouldn't we give you more money to persue this if the value is in billions of dollars?

Dr. PECK. An expanded program would be a good investment for the country, depending——

Mr. YATES. How much of an expanded——

Dr. PECK [continuing]. With the presently constrained budgets.

EXCITING NEW DISCOVERY

Mr. YATES. I know. I am not talking about that. We are talking about an exciting new discovery.

Dr. PECK. It is important.

Mr. YATES. An exciting new discovery which may be of immense value to the United States. Am I overemphasizing something?

Dr. PECK. No, you are not. And the French are very actively pursuing that.

Mr. PENDLEY. If I might interject, the assessment of the value is precise. He is correct. It is exciting. It is worth billions, but the question is, when?

Mr. YATES. All right.

Mr. PENDLEY. Within the next 5 years, 20 years?

Mr. YATES. Let's answer that now. How about now?

Mr. PENDLEY. How long will it take to make it economical to go out at these depths? Do the resources pop up here and not pop up two miles down? Do they disappear here? Do they continue down there?

We are, right now, just delineating these features, and what the scientists tell us is they pop up, they are there for a couple of months. The water shuts off for unknown reasons. The thing collapses, disappears. It pops up somewhere else. How economical is a resource like that? How broad is it? How far does it go?

Mr. YATES. You don't know the answers to those questions, do you?

Mr. PENDLEY. We don't.

Mr. YATES. Will $1,439,000 permit you to get the answers to those questions?

Dr. PECK. Under the current budget, we are planning to do some work this fall.

Mr. YATES. You are really skirting it, you know. You are really not being fair with the committee. You have a very exciting discovery here and you don't know very much about it, do you, and you should know more about it, shouldn't you?

Dr. PECK. Yes.

Mr. YATES. You are not going to learn very much about it for $1,439,000, are you?

Dr. PECK. No.

Mr. YATES. Mr. Gorrell would say that is a direct question.

Dr. PECK. Yes.

Mr. YATES. All right. What should you be doing? Suppose the committee were to ask you to develop a program for the committee, with the cost. Could you do that?

Dr. PECK. Yes.

Mr. YATES. One that would be reasonable, and one which could unquestionably benefit the people of the United States.

Dr. PECK. Yes.

Mr. YATES. Right?

Dr. PECK. Yes.

Mr. YATES. Okay. Did you want to add to that?

Dr. HAMILTON. I was going to clarify one point.

The vents, the rising of the fluids on the ocean floor, apparently turns on and turns of.. But the deposits are created by the long-term process. So although the activity appears to be somewhat ephemeral in nature, the deposits are steadily formed.

So what we are primarily interested in, is the process and the full nature of the formation of the deposits. I think Mr. Pendley is quite correct. Any economic development of these deposits is way down the road.

Mr. YATES. We are not talking about economic development.

Dr. HAMILTON. Right.

Mr. YATES. We are talking about the studies that precede economic development, aren't we?

Dr. HAMILTON. That is right.

Mr. YATES. You cannot have an economic development until you know what you have and how it is happening. Either you will do it or private companies will do it. The question is whether private companies will do it.

Is this ridge within the territorial waters of the United States?

Dr. HAMILTON. The Juan de Fuca Ridge is. The decisions about the legal aspects of these deposits may be before us sooner than the development.

Mr. YATES. Why are the French there if it is within our territorial waters?

Dr. PECK. The French are working farther south.

Mr. YATES. In international waters?

Dr. PECK. Yes. Tracking the East Pacific Rise and also some oceanographic——

Mr. YATES. Well, it has been indicated this is an exciting discovery. Are there others we ought to know about, too? Let's explore that for a minute.

OFFSHORE AREAS FOR STRATEGIC MINERALS LEASING

Here is an article from the Wall Street Journal, dated January 20, 1982:

> The Reagan Administration has taken the first step toward opening offshore areas for exploration and mining of strategic minerals that the U.S. currently imports. Interior Secretary James Watt announced a plan to issue leases to companies interested in developing underwater deposits of manganese, cobalt, titanium, and several other scarce minerals.
>
> Mr. Watt didn't announce many specifics about how the program will operate, but agency officials said they expect the Government to issue the first lease late this year for manganese deposits offshore Georgia and Florida.

Mr. PENDLEY. That is true.

Dr. PECK. That is a matter we touched on yesterday, Mr. Chairman.

Mr. YATES. Georgia and Flordia. Is this near the basin down there? What is it called?

Dr. PECK. Blake Plateau.

Mr. PENDLEY. Off the coast of Georgia, about 60 miles to sea.

Dr. PECK. Another area would be sand and gravel deposits of the North Slope.

Mr. YATES. Do you know enough about the terrain to be in a position to issue leases?

Mr. PENDLEY. Yes, we are, Mr. Chairman. In the 1953 OCS Act, Mr. Chairman, there was a provision for the leasing of not just oil and gas but all minerals. In the past, that activity has never gone forward. We initiated, at the beginning of this year, that activity as a result of studies that have been performed over about the past 4 or 5 years. We will be doing this program on a case by case basis beginning, as the press release indicates there, with the Blake Plateau and manganese nodules, and sand and gravel in Alaska.

Mr. YATES. You know more about those bottomlands or seabeds as you call them, than you do about the Juan De Fuca region, don't you?

Dr. PECK. That is right.

Mr. PENDLEY. No question about it.

Mr. YATES. Yes. So you are in a position to lease. You are not in a position to lease for the Juan De Fuca Ridge at the present time. You don't know enough about it?

Dr. PECK. That is right. Nor does anybody know enough about the economic viability.

Mr. YATES. But aren't you the Agency that the United States depends upon to get the information?

Dr. PECK. It is a very proper function of ours, yes.

Mr. YATES. Okay.

Mr. PENDLEY. We think the information is enticing and exciting enough to cause innovative entrepreneurs to move out into these areas.

Mr. YATES. Your argument is that the committee should not give you any money for it?

Mr. PENDLEY. We should have the program we have asked for, Mr. Chairman. We think that will allow us to develop information.

Mr. YATES. Well, Dr. Peck, I hate to bring up his answer, but he says your program doesn't allow much information.

Mr. PENDLEY. Not as aggressive and exciting as perhaps we would like to do in other times, Mr. Chairman.

Mr. YATES. I see. Other times. All right, maybe this is another time. Are there other organizations involved in similar studies of the areas of spreading ridges?

Dr. PECK. Yes.

Mr. YATES. What are they?

Dr. PECK. The National Science Foundation is supporting some studies by the academic oceanographic institutions.

Mr. YATES. Let me interrupt a minute. Do I understand, Mr. Pendley, that as a result of your last answer, that you would not permit Dr. Peck to provide the committee with the kind of a program that we have asked him to provide.

Mr. PENDLEY. I don't think I said that.

Mr. YATES. No, no, but you talked about the fact that the amount you have available is adequate, and that perhaps private enterprise would be moving out there. Perhaps it would be. I gather from that that you thought that—you are trying to turn that off. You are not suggesting he shouldn't furnish us with the information requested?

Mr. PENDLEY. Well, in accordance with the way in which the committee operates, and our open dealings with the committee; and what is proper and just, as I would be advised by our Assistant Secretary for PBA, we will furnish whatever information you might request. But our position is that the program is sufficient and we would request——

Mr. YATES. We are very much aware of, not only what your position is on this program, but on all the programs.

Mr. PENDLEY. Thank you, sir.

Dr. PECK. I might say, Mr. Chairman, that also NOAA has been involved. We have been working together with them in studies that have gone on in the past.

WATER DATA COLLECTION

Mr. YATES. Okay. For data collection, analysis of the national water system, you are asking for an increase of $1 million. Good for you. Finally you are realizing the importance of the national water system and problems we have. Is the EPA program affected by budget cuts this year?

Dr. PECK. I don't know how that has been affected.

Mr. YATES. Does anybody in your shop know?

Mr. Cohen, wherever you are?

Mr. COHEN. Mr. Chairman, I am not familiar with the details of the EPA budget, but I suspect in the present budget climate, in all likelihood, there are reductions.

Mr. YATES. Is this enough money to carry out the collection and analysis of data for the national water system?

Mr. COHEN. Yes, it is, Mr. Chairman. This represents, in part, an addition of funding to make up for some funding losses a year ago in this budget element, and in part, an effort to keep up with inflation. As you are aware, we operate about 70 percent of the gaging stations in the United States. This is the Federal component of that program. With this additional funding, we will be able to operate our network efficiently and effectively.

Mr. YATES. Will that be enough?

Mr. COHEN. Yes, sir.

Mr. YATES. It is an important program, isn't it?

Mr. COHEN. Yes, sir.

Mr. YATES. Very important, and you have enough money to do it?

Mr. COHEN. Yes, sir.

Dr. PECK. We are using some of the funds we are receiving to examine the networks in each of the States to make sure it is an optimum network and see whether we need to adhere——

Mr. YATES. All right, I am taking your word for the fact you have enough money to do it properly, right?

Dr. PECK. Yes.

RIVER QUALITY ASSESSMENTS

Mr. YATES. River quality assessments are being carried out through the Federal-State cooperative program. Is this any change from prior assessments?

Mr. COHEN. Mr. Chairman, we had a program of river quality assessments funded solely under our so-called Federal program element. The reference you made is to the Federal-State cooperative program. In accordance with the plans developed at the outset of the river quality assessment program, we have completed studies of seven basins. That phase of the work is now completed and we are gradually shifting the techniques and methodology developed as a result of the Federal program into our Federal-State program.

Mr. YATES. Okay. What do you do in connection with the Potomac River, where the States of Maryland, Virginia and the District of Columbia are involved?

Mr. COHEN. It was one of our seven river assessments. We are completing that in fiscal year 1982.

Mr. YATES. Are contributions being made by the States and the District?

Mr. COHEN. No, this was funded solely with Federal funds.

Mr. YATES. It will be completed with Federal funds?

Mr. COHEN. In fiscal year 1982, yes sir.

Mr. YATES. Why were the data stations discontinued?

Mr. COHEN. I am sorry, Mr. Chairman.

Mr. YATES. Page 137 of your justification says the increase will be used to reinstate some of the recently discontinued hydrologic data stations of highest priority to the National Weather Service's flood forecasting activities. Why were these discontinued?

GAGING STATIONS

Mr. COHEN. Mr. Chairman, as I indicated in my earlier response, some of our gaging stations are funded by the so-called Federal program. But the vast majority are funded by the Federal-State cooperative program—roughly 800 under the Federal program and nearly 7,000 under the Federal-State cooperative program. From time to time, the interests of either the Geological Survey or some of our more than 800 cooperators suggest that a gaging station designed for a specific purpose should no longer be operated.

Approximately 2,200 of our gaging stations are used by the National Weather Service for their national flood forecasting system. In those cases where the cooperators deem it no longer desirable to jointly fund a gaging station, we have the problem of maintaining the integrity of the Nation's flood forecasting system.

It is for this purpose, we intend to use some of the requested $1 million to reinstate those gaging stations—on the order of 10 to 15 per year—which we lost as a result of normal programmatic shifts. We will bring them into the Federal program so they are protected and represent an integral network to be used by the National Weather Service.

Mr. YATES. We still have to worry about floods, don't we?

Mr. COHEN. We do, sir.

Mr. YATES. The last few weeks showed us that.

Mr. COHEN. Yes, sir.

Mr. YATES. How does your information help fight those floods?

Mr. COHEN. One of the major aspects of the Nation addressing itself to flooding is to determine the nature and magnitude of the flood. The time of arrival of flood waves, the area of inundation. We provide the basic information across a broad spectrum of areas which address those issues. From what areas would one expect to be flooded, given a given——

Mr. YATES. Are you provided the same kind of warnings?

Mr. COHEN. We provide the physical facilities which measure flow at any moment in time. It is the legal responsibility of the Weather Service to actually issue the warning. They use our data, our information, to forecast in a short time frame, within the next hour or day.

Mr. YATES. If those stations are closed, they can't issue warnings, can they?

Mr. COHEN. That is exactly right and one of the reasons we requested the additional funding.

Mr. YATES. Okay, do you have enough money to do it?

Mr. COHEN. Yes, sir.

Mr. YATES. In this budget. All right, let's talk about the phases of the program. When will the first phase of the two phase program be completed?

TOXIC WASTE

Dr. PECK. Is this the radioactive wastes?

Mr. YATES. No, toxic waste. I am sorry, you got some more money. Incidentally, are you going to be able to expand your program almost four times with the additional money?

Mr. COHEN. Yes sir.

Mr. YATES. Can you do that?

Mr. COHEN. Yes, sir.

Mr. YATES. That is quite a switch isn't it? Usually you are cutting back.

Mr. COHEN. We have a very well trained staff in-house in the fundamentals of hydrology and we are going to be taking some of our very best people, very, very——

Mr. YATES. Are you going to be able to keep that well-trained staff?

Mr. COHEN. Over the years, especially in recent years, there has been more and more competition from industry and academia for the types of people we are training.

Mr. YATES. I know. I am talking about budget cuts.

Mr. COHEN. For this particular program, yes sir.

Mr. YATES. You are able to keep them. No threats on the horizon?

Mr. COHEN. We would not permit a threat on the horizon for this particular program. It is a very high priority program.

Mr. YATES. When will the first phase be completed?

Mr. COHEN. I need to refresh my memory as to what the first phase is, sir.

Mr. YATES. All right.

Mr. COHEN. May I respond to your question by outlining what it is we are going to do and for the moment disregard phase one and two?

Mr. YATES. Page 150 of your justification will probably give you the precise answer to my question.

Dr. PECK. Top of the page.

Mr. COHEN. It will be a moment.

Thank you, Mr. Chairman.

We are taking a two phase approach to the issue of toxic waste ground water contamination. The first phase has been initiated in fiscal year 1982.

Mr. YATES. When do you think it will be completed?

Mr. COHEN. At the present time, we don't have a completion date for that phase. That is fundamental to the nature of what that phase is. We are implementing a program of basic research both in the laboratory and in the field to study the processes associated with toxic waste and ground water contamination. We intend to make an all-out effort, and that effort——

Mr. YATES. Then you don't know when it will be completed?

Mr. COHEN. It has a strong basic research component. We are seeking new information on processes and new information——

Mr. YATES. The answer to my question is yes, then. You don't know quite when it will terminate?

Mr. COHEN. That is correct.

Mr. YATES. You don't know what the cost of the first phase will be either, do you?

Mr. COHEN. We have some outyear projections. As Dr. Peck indicated, we will be looking at our fiscal year 1984 budget within the next day or two. These outyear projections, at least when the program was initiated, envisioned significant increases for the next 3 or 4 years. In all likelihood, I would recommend to Dr. Peck that we trade off from our base, if necessary, to enhance this program.

Dr. PECK. You asked about the compression of the program. The benefits are incremental. Many organic compounds need to be investigated that behave in different ways with clays and stuff in the rock. So a lot will be learned from the start, but it will go on.

Mr. FREDERICK. Excuse me, if I may jump in. Perhaps we can clarify your question a little bit by dealing with what we intend to do in 1982, and what we intend to do in 1983. The 1982 program essentially will involve creation of an interdisciplinary team. Phil intends to bring on certain people.

It will also look specifically at candidate sites for further review, and will develop the framework for the research program to continue. All that is to be accomplished with the fiscal year 1982 program—on the order of $950,000. In fiscal year 1983, the Water Resources Division intends to implement the study at the two sites which have been identified. They are in the process of doing that, beginning development of an expanded ground water modeling capability to look at these specific programs, and get involved specifically in the detailed research, again which will be continued.

Mr. **Yates**. You don't know when the second phase will start?

Mr. **Frederick**. Second phase will begin, in my opinion, in fiscal year 1983 or maybe latter fiscal year 1982.

Mr. **Cohen**. The second phase envisions completing an overview of the quality of the Nation's ground water in a period of 3 to 4 years.

Mr. **Yates**. Where are the two hazardous sites for which field tests will be conducted?

Mr. **Cohen**. They have not been selected. We are now looking at about 25 candidate sites in considerable detail.

PERSONNEL REDUCTION

Mr. **Yates**. Why are you cutting back the staff by one FTE?

Mr. **Cohen**. The Water Resources Division as a subunit, and Geological Survey as a whole, has been required to accommodate a fairly sizable reduction in personnel.

Mr. **Yates**. I thought you had such a crackerjack outfit you wouldn't let anything interfere with it.

Mr. **Cohen**. Now, we will assure that the required staffing for this particular project is, in fact, in place.

Mr. **Frederick**. Mr. Chairman, there are further looks at the staffing versus the funding that we will indeed make. As you very well know, the budget was developed over a longer period of time than the staffing requirements. We have been asked to absorb a cut in staffing and we will make adjustments to cover this.

Mr. **Yates**. Why are you asked to make cuts in staffing? You have such an outstanding group of personnel in all your departments. You brought them together over the years. Why are you getting rid of them now?

Dr. **Peck**. We are not riffing anybody.

Mr. **Yates**. You are attriting them?

Dr. **Peck**. We are attriting them and sharing in the Department and Government-wide reduction.

Mr. **Frederick**. We will pay particular attention to the retention of our high quality professional people to do these kinds of things.

Dr. **Peck**. In fact, we are planning to bring on additional——

Mr. **Yates**. How do your high quality people know that?

Mr. **Frederick**. We communicate that.

Mr. **Yates**. You tell them they are going to stay on?

Mr. **Frederick**. Yes, sir.

Dr. **Peck**. In fact, we plan to bring on new people because we need people with special skills we don't have for this particular program.

ACID RAIN

Mr. **Yates**. Okay. Are you going to have enough money to carry on your acid rain program?

Dr. **Peck**. Yes, sir.

Mr. **Yates**. Who was the Interior Department's representative on the Interagency Task Force on Acid Participation?

Dr. **Peck**. Bette Segal.

Mr. **Yates**. Why are you reducing that program by a position?

Mr. **Frederick**. Same response as before, Mr. Chairman, and ultimately, we may have to shift a position or two from somewhere else in our program. We haven't made the detailed judgments yet.

Dr. **Peck**. It is a difficult program and it will be staffed. Mr. Cohen and I——

Mr. **Yates**. What will be inadequately staffed?

Dr. **Peck**. We will try to cut back on other programs of lower priority—other programs where budgets have been cut and the work can be carried out by contract rather than our own staff, or by State cooperators.

Mr. **Yates**. Is that better for the country? Are your contracting parties better than your own staff?

Dr. **Peck**. We have had, as we discussed yesterday, some notable successes in the contracting out of our work——

Mr. **Yates**. Well, then, the answer to my question is yes.

Dr. **Peck**. Yes, in some cases.

Mr. **Yates**. How about other cases?

Dr. **Peck**. In other cases, by contracting out, you lose some valuable things. Those being having a knowledgeable staff of your own that you can rely on at short notice and to develop future programs and build new staff.

Mr. **Yates**. How much of the total of $2,448,000 is contracted?

Dr. **Peck**. This is out of acid rain?

Mr. **Yates**. Yes.

Dr. **Peck**. Mr. Cohen.

Mr. **Cohen**. Dr. Peck.

Dr. **Peck**. I don't think a large part of the program is contracted. Very little of it, I would think.

SLUC INCREASE

Mr. **Yates**. SLUC is being increased even though 60 percent of the total increase is contract money?

Dr. **Peck**. SLUC?

Mr. **Yates**. Yes, it is being increased, but 60 percent of the total increase is money contracted.

Dr. **Peck**. I can't explain that. Again I will have to——

Mr. **Yates**. That is on page 154. SLUC increases by $30,000, right?

Dr. **Peck**. What that is is rent.

Mr. **Yates**. I know.

Dr. **Peck**. Leased facilities.

Mr. **Yates**. Why is it going up though?

Mr. **Cohen**. GSA.

Mr. **Yates**. But you don't need as much space, do you? People are leaving you.

Mr. **Frederick**. But the increases are going up disproportionately.

Mr. **Cohen**. Mr. Chairman, if I may.

Mr. **Yates**. Mr. Cohen.

Mr. **Cohen**. In response to your earlier question about the contracting, other services are shown on page GS-154 as $599,000. Much of that is "contracting" but it is contracting with our own central laboratories which provide water quality analyses in this particular project.

Mr. **Yates**. Why are you contracting with your own people?

Mr. **Cohen**. I said "contracting." We are buying the services of our own laboratory, which operates on a reimbursable basis.

NATIONAL WATER DATA SYSTEM

Mr. **Yates**. You have got a $500,000 increase for the State Cooperative National Water Data System. What additional States are going to participate in that? Can you put that in the record, or do you know?

Mr. **Cohen**. No, as of the moment, we cannot tell you because we cooperate with every State, and as has been the case in the past, we have cooperative offerings which are greater than the amount of money we can match. As the time approaches to develop our program for fiscal year 1983, we will select those projects that are of the highest priority to the Nation.

Dr. **Peck**. Some States have made notable advances for increasing cooperation. Alaska is one.

Mr. **Cohen**. Virtually all of them.

Mr. **Yates**. What would it take to have the program operational in all States?

Mr. **Cohen**. The program is operational in all 50 States, Mr. Chairman. We have a cooperative program in every State in the United States.

Mr. **Yates**. The table on page 160 shows 49 States involved in 1981. As I remember, there are 50 States in the Union.

Mr. **Cohen**. You are referring to a subelement of the Federal-State cooperative program. You are referring to the water use component of the Federal-State cooperative program. As a matter of fact, the number of States participating in that program has recently declined to 47, not on the basis of our desires, but on the basis of the ability to develop effective programs in those States.

COAL HYDROLOGY

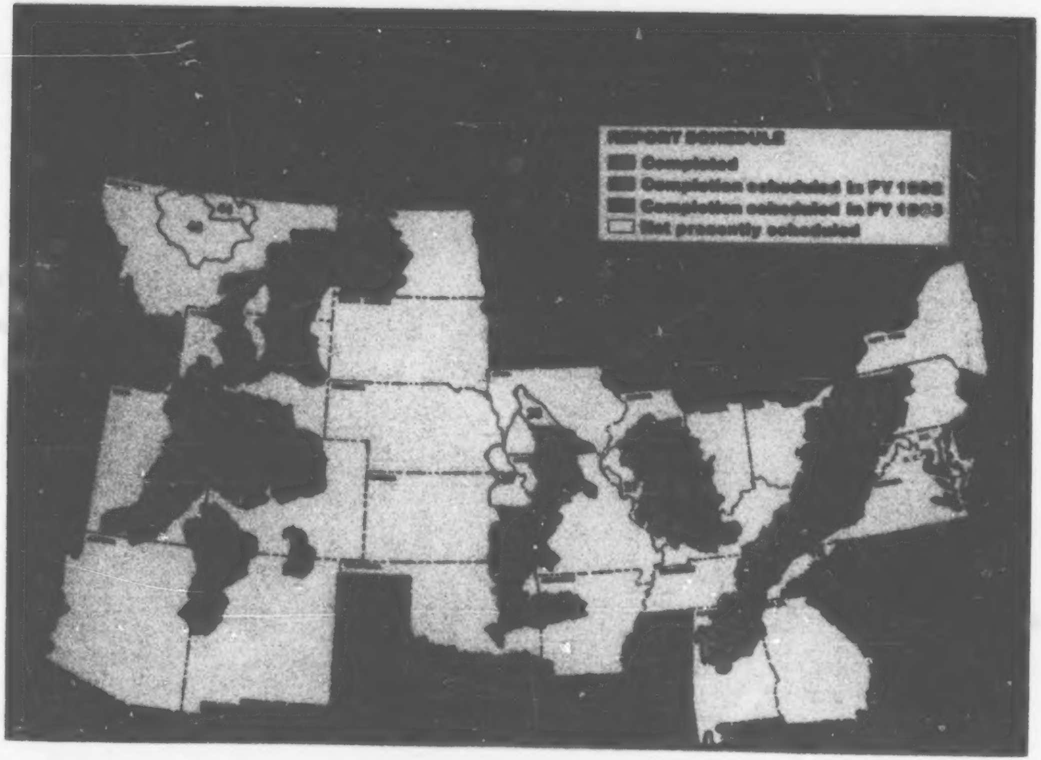
Mr. **Yates**. Let's talk about coal hydrology. Is there any evidence that industry and local governments are picking up the slack in monitoring data?

Mr. **Cohen**. As a matter of fact, there is considerable evidence, Mr. Chairman. The Office of Surface Mining has had a great deal of success recently in, as required by the Surface Mining Control and Reclamation Act, to delegate, if you will, the responsibility for these activities to the States. We can see that through our own cooperative networks. The States are showing more and more interest in entering into cooperative programs with the Survey to do these kinds of work. As those interests and offerings are made, we will give them high priority in terms of our support for the Department's programs.

Mr. YATES. What happens if industry and local governments don't pick up the difference?

Dr. PECK. Much of this program was aimed at establishing a background of data that once gathered, can be used for some time. As the chart points out here, we are well along in the process of publishing a number of reports laying out what the stations are, what the availability of data is, what the historic trends are. So it is partly a one shot affair. It is getting the data out so industry can use it.

[The chart follows:]


REPORT SCHEDULE
■ Completed
■ Completion scheduled in FY 1982
■ Completion scheduled in FY 1983
□ Not presently scheduled

The Geological Survey is in the process of publishing a national series of "Coal Area Hydrology Reports." The major portion of the Nation's coal comes from five coal provinces. A need for hydrologic information characterizing conditions in mined and potential mined areas has become highly important with the increased emphasis on the leasing of Federal coal.

For the selected river sub-basins shown, these reports present much new hydrologic data as well as an overview of the hydrologic conditions and sources of information.

HIGH LEVEL NUCLEAR WASTE

Mr. YATES. All right. The high level nuclear waste investigation program, you are familiar with that. It is a pretty important program?

Dr. PECK. Yes.

Mr. YATES. You are dropping eight jobs?

Dr. PECK. Again this is sort of on the initial planning and distribution of the decrease in personnel, a 400 decrease for the Survey——

Mr. YATES. What happens to the investigation?

Dr. PECK. I think the details of the staffing haven't been worked out yet. I am not sure whether indeed that staff will be cut.

Mr. YATES. Your justification indicates you are cutting it by eight jobs.

Dr. PECK. Mr. Cohen.

Mr. YATES. Mr. Cohen.

Mr. COHEN. As you correctly pointed out, Mr. Chairman, the reduction in personnel ceiling in the Geological Survey has been prorated across all programs.

Mr. YATES. Who is going to do this investigation?

Mr. COHEN. As Mr. Frederick pointed out, he does much of the activity—recommends to the Director where our limited personnel resources will go. As is the case with the two we discussed previously, this is a high priority item. I think I can speak for the Geological Survey. I assure you, it will be adequately staffed.

Mr. YATES. Well, if it was adequately staffed with an additional eight last year, why is it adequately staffed with eight fewer this year?

Mr. COHEN. I guess the thrust of my intended response to you is if in fact the reduction of eight jeopardizes the program, I think there will be internal adjustments within the Geological Survey to ensure the program is not jeopardized.

Mr. YATES. Why would you want to do that? Is it that important?

Mr. COHEN. It is a very high priority program, yes sir.

Mr. YATES. How high?

Mr. COHEN. Among the highest we have in the Survey.

Mr. YATES. You are losing eight jobs?

Mr. COHEN. My response is as previously stated. I am sure the Director's office, as he adjusts personnel ceilings, will assure this program is adequately staffed. That is not intended to be evasive, sir.

Dr. PECK. The figures represent——

Mr. YATES. Wait a minute. You have a team working on this, haven't you?

Mr. FREDERICK. Yes sir.

Mr. YATES. All right. What happens to that team? Are you going to keep them? Is the justification wrong?

Mr. FREDERICK. It may indeed turn out to be wrong by a person or two or maybe even a dozen or so. Again, as kind of a matter of explanation, this program was put together earlier. We had an across the board cut——

Mr. **Yates**. Are you telling the committee you won't cut this program by eight people?

Mr. **Frederick**. We are telling the committee we will not cut this program to the point where the program will be jeopardized.

Mr. **Yates**. I am not asking you that, Mr. Frederick. I am asking you whether you are going to cut the program by eight people?

Mr. **Frederick**. I can't promise you, Mr. Chairman, that we won't ultimately cut the program by eight people. What we will do though, is look at the program, look at the objectives and put in the number of people we need to do the job.

Mr. **Yates**. Yes, but I don't understand that. I have asked you whether you had a team on board. You said yes, you do.

Mr. **Frederick**. We do, yes.

Mr. **Yates**. Are you going to cut any of those people?

Mr. **Frederick**. We won't cut any of the people we consider absolutely essential——

Mr. **Yates**. Are you going to cut any of those people?

Mr. **Frederick**. I don't know that we are indeed cutting those people. We will look at that. If we can find a way to reduce the level——

Mr. **Yates**. Suppose the committee agreed with you that this was a high priority program and insisted you don't cut any of those people, would you follow that direction?

Mr. **Frederick**. Well, sir, I think we would need to look at the program itself to see if there are ways we could get the job done just as effectively, and just as cheaply using resources from others, such as the States and other input.

Mr. **Yates**. If you have that kind of an alternative, why didn't you propose it to the committee then? The only thing, you have presented to the committee is that you are going to cut the program. You are going to continue an existing program under existing operating practices with eight less people. You have described that as one of your top priority programs.

Mr. **Frederick**. Yes sir, we indeed have.

Mr. **Yates**. It is kind of stupid to cut it, isn't it?

Mr. **Frederick**. We are not sure that it is stupid.

STATE GEOLOGICAL SURVEY INVOLVEMENT

Dr. **Peck**. It depends on just how we carry out the program. For example, part of the program involves cooperation with a number of State geologists in the Western States to examine—this is phase one study—to look at the suitable sites. If some of the work is carried out by the States' survey personnel, gathering together the regional hydrology and geology, then it wouldn't require staff on our own part. So I think you would want us to look carefully at this and all our other——

Mr. **Yates**. What State programs are being increased?

Dr. **Peck**. A large element of this is the survey of the Great Basin area in concert with the State surveys in a dozen Western States.

Mr. **Yates**. How many of your high priority programs are being ripped apart as this one is?

Mr. **Frederick**. Mr. Chairman, we don't consider this program is being ripped apart. Again, one of the principal activities in this program is the Basin and Range study in the Western United States. You can well imagine that this is a highly volatile political issue. So our ability to get the States involved depends somewhat on the politics. We are trying to get the States more involved. If indeed we can get the geological surveys of the States involved, we can use fewer people on the part of the USGS.

We also are developing techniques, computer models and that sort of thing, which hopefully can help us. What I am saying to you is if we can't work this all out, we will put some more people back in there.

PERSONNEL RESTRICTIONS

Mr. **Yates**. The fiscal year 1982 Appropriation Act has an administrative provision that says this:

"Provide further that employment funded by the Act shall not be subject to any personnel ceiling or other personnel restrictions for personnel management or other than permanent employment."

Are you familiar with that, Mr. Gorrell?

Mr. **Gorrell**. Yes, I am. Very much so.

Mr. **Yates**. Why are you getting rid of eight people then?

Mr. **Gorrell**. We have gotten from OMB full-time equivalent allocations which we have indicated——

Mr. **Yates**. Is OMB violating the act then?

Mr. **Gorrell**. I can't answer that categorically. We have asked our Solicitor for an opinion on that particular——

Mr. **Yates**. I see. How long has your Solicitor had the question before him?

Mr. **Gorrell**. A couple of months.

Mr. **Yates**. Okay. It must be a very difficult question.

Mr. **Gorrell**. It is a very difficult question. We are characterizing our personnel allocations as allocations now, and not as ceilings, in fiscal 1982.

Mr. **Yates**. Is that the same category as revenue enhancement?

Mr. **Gorrell**. I am not sure.

Mr. **Yates**. We are living by euphemisms, aren't we?

Mr. **Gorrell**. Of course.

Mr. **Yates**. Budget constraints do that, don't they?

Mr. **Gorrell**. Budget constraints do that.

Mr. **Yates**. Yes.

Mr. **Gorrell**. If I may——

Mr. **Yates**. But how does this committee carry out its responsibility of making sure that important programs of the Government are adequately funded? Suppose we don't agree with OMB? Should we continue this? Apparently Mr. Cohen says he has a crackerjack team here. OMB says get rid of eight of your crackerjack team.

Mr. **Gorrell**. OMB didn't say that.

Mr. **Yates**. What did it say?

Mr. **Gorrell**. OMB told us that our full-time employment, full-time equivalent total for 1982 is 79,312 for the Department. That includes everything including——

Mr. **Yates**. If you don't take the eight out of this operation, because it is so important, you are going to take those eight out of another operation that isn't so important, right?

Mr. **Gorrell**. That is right, and I will make the point this way. That our allocation for 1983 is 75,944. An overall reduction in the Department of 4.2 percent.

Mr. **Yates**. Do you think we ought to submit this to GAO to see whether or not they say that your word allocation is a devious interpretation of the statute?

Mr. **Gorrell**. I don't think it is a devious interpretation, Mr. Chairman. What we have done here——

Mr. **Yates**. Is tried to survive.

Mr. **Gorrell**. We have tried to survive. We have tried to estimate the work years that are required the best we can with the dollars we have available to us. The other point I would like to make is that in these allocations, while the Department is enjoying a 4.2 percent reduction, Geological Survey is being reduced, 3.9 percent. They did not take—in other words, other Bureaus——

Mr. **Yates**. Perhaps we shouldn't have had any reduction, Mr. Gorrell. Perhaps it consists of such high quality people doing such high quality work that they shouldn't have had any reduction.

Mr. **Gorrell**. That was a judgment that was considered and not made. The Geological Survey had to share in the reduction, but not as much as other Bureaus or offices in the Department.

REIMBURSEMENTS FROM NOAA

Mr. **Yates**. NOAA is going to give you funds to reimburse you for land satellite data processing, archiving and cataloging, right?

Dr. **Peck**. Yes.

Mr. **Yates**. Why didn't they do it before?

Dr. **Peck**. This follows from the Administration's decision that NOAA would have the lead responsibility in nonmilitary satellites.

Mr. **Yates**. Are there other areas where reimbursement can occur?

Dr. **Peck**. Under this program, there is some reimbursement from the sale of aerial photographs.

Mr. **Thorley**. He is referring to Presidential Directive 54, issued in 1979, which gave NOAA management responsibility for the land satellite program. That reimbursement is limited to that responsibility.

Mr. **Frederick**. Mr. Chairman, we have just signed a memorandum of understanding with NOAA to provide those particular services. As far as we know, the funds to reimburse the Geological Survey for those actions carried out on behalf of NOAA remain in the NOAA budget.

Mr. **Thorley**. That is right, they have requested funds of which our $4.77 million is supposed to be a part.

NPRA AND BARROW GAS FIELD

Mr. **Yates**. Why have you got $16 million available in this program, for support of the royalties management program?

Dr. **Peck**. This represents funds that were obligated as part of the exploration but were not expended.

Mr. **Yates**. Why isn't the cost of operating a gasfield not passed on to the consumers?

Mr. **Frederick**. It is a fairly complex issue, Mr. Chairman. We understand that basically it goes back to the legislation itself in terms of guidelines that were provided in the legislation and the interpretations that have subsequently been made.

Mr. **Yates**. Probably because there are so few——

Mr. **Pendley**. Mr. Chairman, if I might add an additional point, we have requested of the Federal Energy Regulatory Commission a response as to our authority with regard to increasing gas prices. We have received a letter from them regarding what actions can be taken with regard to our determinations as to the nature of the gas and gasfields. We are in the process of making those determinations. But even if we went to the highest rate in this situation, it would fall far short of the cost of producing that gas. So we would still have a shortfall in the program, Mr. Chairman, even if we were able to charge maximum rates.

Dr. **Peck**. The gas was originally developed to supply gas to the Federal installations. Those have been shut down in the interim. Now almost all the gas goes to the Natives.

Mr. **Yates**. I know.

Dr. **Peck**. It is going to be a subsidy of about $10,000 per dwelling for the next year. It is going to get far worse because in a few years, a very few years, new gas reserves have to be developed. It will cost up to $100 million to develop this.

Mr. **Yates**. This is the Barrow field. We have some kind of contract with those Natives haven't we?

Dr. **Peck**. When the Geological Survey was given responsibility for the NPRA, we took over, from the Navy, the responsibility for supplying gas to the Natives.

Mr. **Yates**. I remember. It was kind of an outlandish setup.

Dr. **Peck**. We could almost ship them to Florida for the winter.

Mr. **Dicks**. For that much money?

Mr. **Frederick**. Yes. To Hawaii.

Mr. **Yates**. Is there any legislation pending on this dealing with the subject?

Mr. **Frederick**. Not that I am aware. I think perhaps the Secretary will propose legislation sometime fairly soon. In addition to the possibility of price increases mentioned, we are also looking for methods in the future, dealing with the question of gas to Barrow.

RESULTS OF NPRA ASSESSMENT PROGRAM

Mr. **Dicks**. Just for my purposes, I have been one of those, a lone voice on the committee, who thought NPRA program was frankly a waste of taxpayer money. I am just curious, now that we are done—we are done aren't we?

Mr. **Pendley**. We are closing out, Mr. Chairman.

Mr. **Dicks**. What have we achieved?

Dr. **Peck**. I would like to turn it over to Mr. Devine, who has been running the program for the last several years.

Mr. **Devine**. You are correct. The program is now closed down other than the operation of the Barrow gasfield, and as we collect the final data, and put together our final reports, we believe we have learned a rather extensive regional geologic awareness of the oil and gas potential in NPRA. We feel we demonstrated the ability to operate in an environmentally safe manner in the event that commercial deposits be discovered in NPRA. And we have demonstrated it can be operated without undue hazard to either the environment or the personnel involved.

We have also demonstrated that, at least in our judgment, there are not a variety of Prudhoe Bay-sized oilfields awaiting discovery in NPRA. On the other side, we have not closed out the option that, indeed, within that range there still is the potential for sizable petroleum resources.

Dr. Peck. Within the framework of information, it puts us in a position where we can go ahead and lease. We have made extensive——

Mr. Dicks. For less money?

Mr. Pendley. For less money.

Mr. Dicks. The bottom line is, how much did we spend on this, $1 billion?

Mr. Devine. Almost, not quite.

Mr. Dicks. About $1 billion we have spent to prove there wasn't very much oil there, which will result in us getting less for our leases once we lease them. I think that has been a poor investment for the taxpayer.

PRIVATE SECTOR EXPLORATION

Mr. Pendley. We agree with your final assessment that the best way to go is to open up the areas to the private sector for development because we receive bonuses as a result of that.

Mr. Dicks. Plus you get so much more total exploration in the area when you get those private companies doing this with their skillful people. The committee has been strongly supportive of this activity. It is one of the few areas I have separated myself from the committee, because I felt we could get a much more extensive look at the area if we used the private sector, at no cost to the taxpayer.

Mr. Pendley. Mr. Chairman, you touch on a very unique aspect of this. That is the point: If the Government has to pick out the areas to go to, the Government may not make the right decision. If we have the wealth of knowledge in the private sector to pick and choose wherever they think it might go——

Mr. Dicks. And these are the people who have to make a profit on these things.

Mr. Pendley. They have to live and die with the decision. That is why the Secretary has asked the entire area be opened, that the Government not make a decision about what tract should be open, but in fact, that the entire OCS should be available.

Mr. Dicks. Except we hope you would be very cautious about those areas where there are unique environmental concerns.

Mr. Pendley. Oh, of course, and we have been.

Mr. Dicks. What worries me here is that we spent nearly $1 billion of the taxpayers' money, and the bottom line is, we are probably going to wind up getting less for the leases now because of the effort. Isn't that a fair assessment?

Mr. PENDLEY. We are not sure, Mr. Chairman. We have had mixed results as a result of the leasing opportunity, which this committee, I might add, provided us in the appropriations bill. And thank goodness it did, too, that we were able to move aggressively to put up two million acres of land. We did have a sale in late January, and the returns were not as exciting as we might have anticipated. But yet, they did involve some $57 million that the companies are willing to lay on the table to come forward on about 25 tracts.

We are going to have another sale in May, and we hope we will have the kind of interest. It will only take one discovery up there to turn this around, and we are hopeful.

Mr. DICKS. But we didn't get that one discovery on the basis of the $1 billion we spent on this project.

Mr. PENDLEY. No, Mr. Chairman, we didn't. USGS has testified in the past that on all wells they had shows, but not producable commercial quantities. We anticipate that one of the orientations of the program was for a broad overview, a broad analysis. So we think that with industry going in looking for commercial, looking for producible commodities, we might see that.

NPRA PETROLEUM RESOURCE ASSESSMENT

Mr. DICKS. How many wells did we drill?

Mr. DEVINE. Twenty-six, sir.

Mr. DICKS. Twenty-six wells?

Mr. DEVINE. Yes sir, in an area roughly the size of the State of Indiana.

Mr. DICKS. Twenty-six wells. Let's put the chart up so we can look at them.

[The information follows:]

STATUS OF NPR-A FIRST LEASE SALE

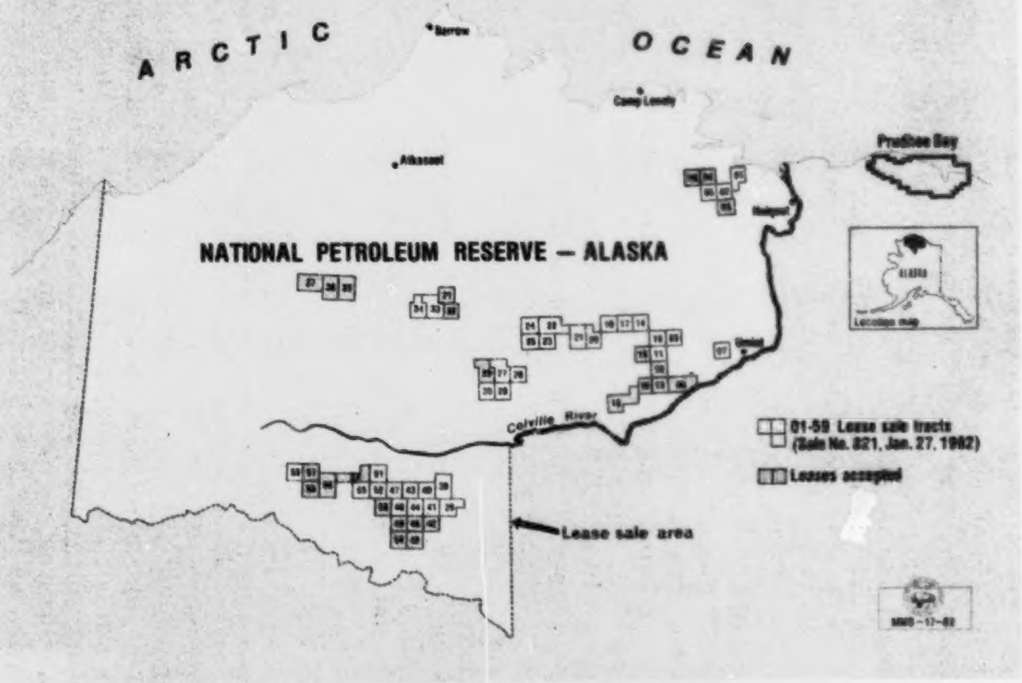

ARCTIC OCEAN
Barrow
Camp Lonely
Atkasook
Prudhoe Bay
NATIONAL PETROLEUM RESERVE — ALASKA
Umiat
Colville River
Lease sale area
Location map
01-59 Lease sale tracts (Sale No. 821, Jan. 27, 1982)
Leases accepted

Exhibit reflects lease sale tracts offered and leases accepted on first lease sale on the National Petroleum Reserve - Alaska held January 27, 1982.

Mr. **Dicks**. I am informed that your initial assessment of the area is less than your final assessment. Is that true?

Mr. **Pendley**. Of the petroleum resources?

Mr. **Dicks**. Yes. Your final assessment was greater than your initial assessment. Is that accurate?

Mr. **Devine**. That is not my understanding.

Mr. **Dicks**. That is according to your testimony in last year's record.

Mr. **Pendley**. The potential of the area, oil and gas potential as a result of the USGS drilling?

Mr. **Dicks**. I thought it was less. Has your assessment changed.

Mr. **Devine**. Yes, it has. Largely, what the change in the assessment has been, is reducing the spread of uncertainty.

Mr. **Dicks**. Your initial assessment was 3.24 billion in 1978. Then it went up to 8.19 in 1979. Then it dropped back to 7.12. That was in 1979, September. Then it dropped in May of 1980 to 5.97. It is April of 1982. What is your assessment today?

Mr. **Devine**. I can't answer that question. That is not the part that I have.

Mr. **Frederick**. We can give to you for the record the specific assessment, Mr. Chairman.

[The information follows:]

NPRA Resource Assessment

Six wells have been completed in the NPR-A since the last assessment of undiscovered oil and gas resources was made by the Department of the Interior in May 1980. As the results from these wells did not suggest any "surprises" in our understanding of the oil and gas potential of the NPR-A, no more recent assessment has been prepared.

Mr. **Frederick**. The fact of the matter is, the assessment has changed over time as we have developed additional information. The initial assessment was based on hardly any information at all. Basically, inference. With the collection of information, both inside and outside the area, we have moved that assessment. As Mr. Devine suggests, what we have done basically is reduced the uncertainty.

There is a wide range of uncertainty built into our assessment where we had not very much information. We have been able to pinpoint that a bit more. Perhaps we may be even a little less optimistic about NPRA than we were earlier.

Mr. **Pendley**. We should be reluctant to draw the curtain down on the potential of NPRA. Twenty-six wells in an area the size of Indiana. They drilled some 300 wells in the overthrust before they made——

HIGH COST TO TAXPAYERS

Mr. **Dicks**. Don't you agree that we would be much better off had we not wasted $1 billion of taxpayer's money, and to have let the private sector go in there in the first place? We could have more wells drilled and wouldn't cost the taxpayer a single cent.

Mr. **Pendley**. And it would have brought in revenues. I am in total agreement.

Mr. **Dicks**. Is there any way we can justify what we did in your judgment?

Mr. **Pendley**. No sir. The only justification, Mr. Chairman, is the land was unavailable for leasing. This committee, thank goodness, solved that problem.

Mr. **Dicks**. What you are saying is the law on the point prohibited—

Mr. **Pendley**. Private leasing.

Mr. **Dicks**. It wasn't until this committee changed that——

Mr. **Pendley**. Exactly correct, Mr. Chairman.

Mr. **Dicks**. During the time frame before the law was in place to allow for the private exploration was it justified, to spend $1 billion dollars in drilling 26 wells? That is pretty expensive isn't it?

Mr. **Pendley**. Yes sir, it is. Given the law that no private drilling was permitted, given the 1973 Arab oil embargo, and the concern about finding new domestic resources, given the fact that the only other way to go was to open the area up, the committee probably did the best thing and let the Government drill. But the really best answer is to let the private sector go in because, as you point out, they are putting their necks on the line, putting their cash on the barrel head. They have the expertise. Those are the people that ought to be out there.

The Government is the last entity that should be exploring for natural resources, be they hydrocarbons or be they strategic and critical minerals. The private sector has that knowledge, and expertise, and they pay us to do it.

Mr. **Dicks**. Go ahead. I know you are eager to justify spending that $1 billion.

Mr. **Frederick**. Not quite. I do think there are a couple of things. The first is—and you know this, Mr. Dicks—we think we did an excellent job in carrying out the congressional mandate in the NPRA. We did what we were asked to do, and I think we did it with less money than was finally appropriated. So, number one, we would like to get on the record that point.

Second, there is a great deal of information that is available now. I wouldn't argue that it has been worth the $800 to $900 million spent, but there is a great deal of information both in resources and in terms of——

Mr. **Dicks**. Yes, but the oil companies told us repeatedly that what you have put together would be of little value to them in their assessment of where to go and what to do in the NPRA. Are you contradicting that?

Mr. **Frederick**. I think so, a little bit.

Mr. **Dicks**. I find that hard to believe from where I sit.

Mr. **Frederick**. I think they were selling at that point. Again, we are not arguing whether the program should have been initiated. All we are saying is that the information collected there indeed will be valuable to the industry and the Government in managing programs when they are developed, and when the private leasing——

Mr. **Dicks**. You are right. This was argued in the Congress. I lost. I think the taxpayers lost, too.

FUNDS AVAILABLE FOR ROYALTY MANAGEMENT

Let's go back to the $16 million. I want to make sure I understand this. Secretary Watt was here. He wants to make it possible to transfer $16 million from the NPRA over to the managment of the oil and gas royalty program. Could you give me a little information on that?

Mr. PENDLEY. Mr. Chairman, I can't go much beyond what the Secretary did. I know the Secretary did provide for the committee last Thursday, proposed language that would permit us to take unobligated, appropriated but unobligated funds, from NPRA that still exist. We think the floor on that is some $16 million. That is the figure you speak of. It may be greater than that—we have yet to sort that out. To make it available to the important royalty management program that we have initiated, which includes an Inspector General lookback audit component.

Now, the precise level and detail of the expenditure of those funds has not yet been resolved by the Administration. We are developing those figures and we are anxious to provide them to the committee.

Mr. DICKS. We would like to have it by tomorrow. Can you do that?

Mr. PENDLEY. I don't know if we can, Mr. Chairman.

Mr. FREDERICK. Yes, we can.

Mr. DICKS. Where it is coming from or where it is going?

Mr. FREDERICK. We can provide the information on the source.

Mr. DEVINE. Yes, sir.

Mr. YATES. We want to know how you are going to use it.

Mr. PENDLEY. We don't know whether we can provide that by tomorrow.

Mr. DICKS. Could you get it to us by the 20th of April?

Mr. PENDLEY. Certainly.

[The information follows:]

The Royalty Management Program Supplemental request has not yet been resolved by the Administration. This information will be provided to the committee at a later date.

[COMMITTEE NOTE.—A supplemental request was provided on June 30, 1982.]

FUNDING SUMMARY

Exploration of National Petroleum Reserve in Alaska Appropriation
Current Status and FY 1982 Requirements
($ in Millions)

	Appro-priations FY 77-FY 81	Funds Obligated 4/1/82	Carryover and Recovered Resources	FY 1982 Appro-priation	Total Budget Authority	FY 1982 Require-ments	Proposed Reprogram-ming Within NPRA	Available for Transfer
A. Naval Petroleum and Oil Shale Reserves								
Funds transferred 6/1/77	39.2	34.0	5.2	--	5.2	--	(2.4)	2.8
B. Exploration of National Petroleum Reserve in Alaska								
I. Evaluation and Assessment of NPRA								
a. Exploratory Drilling	560.6	550.4	10.2	--	10.2	3.7	--	6.5
b. Geophysical Exploration	80.1	73.6	6.5	--	6.5	--	--	6.5
c. Geologic Investigations	11.0	8.7	2.3	--	2.3	1.9	--	.4
Subtotal	651.7	632.7	19.0	--	19.0	5.6	--	13.4
II. Barrow Area Gas Operations, Exploration and Development								
a. Operation and Maintenance	7.6	6.7	.9	2.2	3.1	7.5	4.4	--
b. Exploration and Development	56.6	44.4	12.2	--	12.2	10.2	(2.0)	--
Subtotal	64.2	51.1	13.1	2.2	15.3	17.7	2.4	--
III. Environmental Restoration	7.4	6.9	.5	--	.5	--	--	.5
TOTAL	762.5	724.7	37.8	2.2	40.0	23.3	--	16.7[a]

[a] $16 million proposed to be transferred in FY 1982 to Surveys, Investigations and Research, Conservation of Lands and Minerals for Royalty Management Program.
$.5 million proposed to be transferred in FY 1983 to Barrow Area Gas Operation, Exploration, and Development appropriation to fund negotiated labor increase in operation and maintenance contract.

Mr. **Frederick**. We have, in the NPRA program, identified some $25 million that has been deobligated. Funds we and the contractor have reviewed. At least we feel that the contractor does not need to carry out the NPRA program. Of that, we need some money to operate the Barrow gasfield. We need additional money for cleanup of the NPRA operation——

Mr. **Dicks**. $9 million for that?

Mr. **Devine**. Yes sir.

Mr. **Frederick**. Yes sir. About $16 million we propose to be used for royalty management.

Mr. **Dicks**. Every dime we can save will be one that I will appreciate.

ROYALTY MANAGEMENT

Let's go to royalty management. I am concerned about the fact that you are cutting back 34 people on this program. Why is that? This is supposed to be a high priority.

Mr. **Pendley**. It is.

Mr. **Dicks**. We hear from Mr. Linowes and the Secretary that after years and years and years of incompetence—and there is no other way to characterize it, in my judgment—that finally we are going to do something about this problem. This committee has been pushing, pushing as hard as we can, and now we see 34 positions are going to be reduced. Now that doesn't look to me like the kind of effort that the Congress wants here. Congress wants you to do this properly. Mr. Linowes said if you are going to have these audits of these companies, that you have to have some people who can work with the auditors so that they know what to audit.

Mr. **Pendley**. Exactly.

Mr. **Dicks**. If you don't have the people there to accomplish this, you are going to waste the taxpayer's money in doing the audits. Now, how do you accomplish this at the same time you are going to be making a very substantial reduction in staff?

Mr. **Pendley**. Mr. Chairman, the 34 figure is the result of the program coming in at different times. As a result of the Linowes Commission recommendations, we are slightly out of phase right now with regard to the implementation program. I think when we come forward with these figures on the 20th, I think you will see the resolution of that 34 number. I don't think that 34 will be there any more. We intend to resolve that.

Mr. **Dicks**. All right.

Mr. **Pendley**. It is an anomaly that appears here in this document for which I apologize, but I think we are going to resolve that with the figures we bring to you on the 20th.

Mr. **Dicks**. As I understand it, you have $7 million worth of other services that will be contracted out. Is that correct?

Mr. **Pendley**. Yes sir.

Mr. **Dicks**. I think the committee wants to know in some detail what your plans are for that contractor.

Mr. **Pendley**. We have several contracts out now, including a contract with American Management Systems.

Mr. **Dicks**. They are a very good company, I am told.

Mr. **Pendley**. Thank you. I think they are. We have been told they are. We have a subcontract with them with Price Waterhouse, one of the big eight companies, developing our system. We are running all of the contract deliverables through our Inspector General, as well as through our contracting experts at the Policy, Budget and Administrative Assistant Secretary's office to ensure that this receives as good a look as possible.

In addition, we have a contract with Mitre Corporation to follow up and provide us additional oversight. Mitre Corporation reports directly to our Under Secretary. So we are trying our best to ensure that we have as many looks at these proposals for a rather significant undertaking as we can get.

Mr. **Dicks**. All right. We are concerned not just about what happens here, but we want people available to go out and do these inspections that were emphasized in the Linowes report.

Mr. **Pendley**. No question about it.

Mr. **Dicks**. They are necessary. You have to have those on-site inspections, you have to have security.

Mr. **Pendley**. Yes, sir.

Mr. **Dicks**. You know, it is just a national disgrace that this has been allowed to drag on. Do you realize when the first time this was brought to the attention of the USGS?

Mr. **Pendley**. Twenty years ago?

Mr. **Dicks**. 1952.

Mr. **Pendley**. Twenty years ago.

Mr. **Dicks**. Well, it is 30.

Mr. **Pendley**. Is that 30?

Mr. **Dicks**. Thirty years this has been kicking around. This is what worries me most. At a time when credibility of the Government is at an all time low, quite frankly; and people are being cut off of important programs; kids can't get a college education; graduate students can't get money to go to college; and we are taking people's benefits away in the social program area, to have 10 percent of the revenues that are due the Government from the leasing of these properties, not being collected because of an antiquated system is really a national disgrace. This is what makes the ordinary citizen lose respect and confidence in his Government.

I want to compliment this Administration at least for getting a handle on this, because it is this kind of abuse, incompetence and fraud that turns off the American people and they are so right in this respect. I can't think of anything we can do on this committee now that we have the NPRA shut down, that will produce more for the taxpayers in the terms of resources than getting a handle on this. There just can't, in my judgment, be a higher priority. This leakage, loss of money, is a national disgrace.

Mr. **Pendley**. I agree, Mr. Chairman.

Mr. **Dicks**. And 30 years is enough, isn't it?

Mr. **Pendley**. Yes sir. And Mr. Chairman, the Secretary has made a personal commitment to end this and return the confidence of the American people to the Government, and to the collection of these royalties in the system. When he asked me to take the job I now hold as Acting Director of the MMS, he told me my first priority was to return the confidence of the American people to the system, and to the manner in which we collected these royalties.

It is a matter of deep concern to us. The figures that the Linowes Commission indicates in their report of monies lost is a national disgrace. It is an item of very high concern. So we are moving aggressively to implement the recommendations of the Linowes Commission, to ensure that we can fully collect these royalties.

QUESTIONS FOR THE RECORD

Mr. **Dicks**. There are questions we want to ask for the record.

Mr. **Pendley**. Would you want me to respond now or in writing?

Mr. **Dicks**. Just for the record. I think we want it in writing.

[The questions and answers follow:]

GEOLOGICAL SURVEY
Surveys, Investigations, and Research

Additional Committee Questions

NATIONAL MAPPING, GEOGRAPHY AND SURVEYS

Question. Will the reduction in the land use and land cover mapping program inhibit existing or potential joint funding agreements with States?

Answer. No, it will not.

Question. At page 38 of the annual report is a table showing mapping production by State for four different map scales. Can the Survey provide to the Committee a comparable table showing for each of the map series how much has been completed by State through fiscal 1981 and how much additional would be expected to be completed in fiscal year 1982 and 1983, and what the total coverage for each map series for each State in square miles would be?

Answer. The information is provided on Tables 1 through 4. The Geological Survey does not have a goal to provide complete orthophotoquad coverage. The objective of the orthophotoquad program is to be responsive to specific, identified requirements of Federal and State agencies. In some cases, orthophotoquad production is for duplicate orthophotoquads to replace older orthophotoquads where the imagery is outdated.

GEOLOGIC AND MINERAL RESOURCE SURVEYS AND MAPPING

Question. At page 77 there is a brief description of the justification for the reduction of $2,600,000 for the volcano hazards program. This is a reduction of almost one-third.

What are the higher priority program needs that are more important than the volcano hazards program?

Answer. The areas that are of higher priority include increased activity in the area of Strategic and Critical Minerals, Coal Investigations, CUSMAP, AMRAP, Geologic Framework, Offshore Oil and Gas Resources, Energy Related Hazards, programs in ground water contamination, technical support to Federal and State officials faced with disposal of toxic waste, Acid Rain, lease inspections, and Royalty Management.

Question. An increase of $500,000 is requested for the geologic framework program. How much of the increase goes to mapping regions on ongoing mission-oriented programs and how much to initiate mapping in 2-3 areas where gaps exist?

Answer. To maximize benefits from the increase, areas selected for mapping will relate to both mission-oriented work and to filling gaps in areas where information is vitally needed to synthesize the geologic framework of the region. About one-half of the increase will be used to map areas related to mission-oriented work, and the other one-half to fill gaps in the geologic framework of our Nation.

Table 1: 1:24,000-scale Primary Topographic Mapping

State	Coverage end of FY81 in sq. mi. and percent	Estimated Production (sq. mi.)		Estimated Coverage end of FY83
		FY 1982	FY 1983	
ALABAMA	45,092(87%)	1,500	1,150	92%
ALASKA 15-min	494,892(84%)	3,300	4,700	85%
ARIZONA	68,144(60%)	900	800	61%
ARKANSAS	44,561(84%)	2,000	1,150	89%
CALIFORNIA	97,675(62%)	3,500	2,600	65%
COLORADO	97,746(94%)	1,850	750	96%
CONNECTICUT	5,012(100%)	--	--	100%
DELAWARE	2,043(100%)	--	--	100%
FLORIDA	58,462(100%)	--	--	100%
GEORGIA	58,914(100%)	--	--	100%
HAWAII	6,187(96%)	--	150	98%
IDAHO	61,974(74%)	1,800	1,600	78%
ILLINOIS	36,999(66%)	1,700	2,150	72%
INDIANA	36,180(100%)	--	--	100%
IOWA	48,334(86%)	1,950	1,700	92%
KANSAS	82,230(100%)	--	--	100%
KENTUCKY	40,411(100%)	--	--	100%
LOUISIANA	26,862(56%)	1,700	2,100	64%
MAINE	7,171(22%)	1,000	2,250	31%
MARYLAND	10,444(100%)	--	--	100%
MASSACHUSETTS	8,267(100%)	--	--	100%
MICHIGAN	34,223(58%)	2,800	2,450	67%
MINNESOTA	72,843(86%)	6,800	2,300	97%
MISSISSIPPI	28,757(60%)	3,400	4,000	75%
MISSOURI	56,926(82%)	1,800	1,300	86%
MONTANA	101,522(69%)	2,600	2,550	72%
NEBRASKA	60,953(79%)	1,700	--	81%
NEVADA	48,947(44%)	2,450	2,350	49%
NEW HAMPSHIRE	2,809(30%)	350	1,050	45%
NEW JERSEY	7,790(100%)	--	--	100%
NEW MEXICO	91,191(75%)	2,050	1,700	78%
NEW YORK	45,754(93%)	--	--	93%
NORTH CAROLINA	41,765(79%)	1,850	2,000	86%
NORTH DAKOTA	65,889(93%)	900	1,300	96%
OHIO	41,315(100%)	--	--	100%
OKLAHOMA	59,502(85%)	900	1,400	88%
OREGON	44,675(46%)	1,550	2,400	50%
PENNSYLVANIA	45,309(100%)	--	--	100%
RHODE ISLAND	1,209(100%)	--	--	100%
SOUTH CAROLINA	21,723(70%)	1,200	2,000	77%
SOUTH DAKOTA	64,720(84%)	2,400	2,300	90%
TENNESSEE	42,101(100%)	--	--	100%
TEXAS	232,762(87%)	5,300	6,550	91%
UTAH	52,556(62%)	1,500	1,150	65%
VERMONT	5,610(58%)	200	--	60%
VIRGINIA	40,595(100%)	--	--	100%
WASHINGTON	41,909(62%)	1,250	1,450	65%
WEST VIRGINIA	24,229(100%)	--	--	100%
WISCONSIN	40,818(73%)	550	1,700	76%
WYOMING	76,855(79%)	1,250	950	81%
PUERTO RICO	3,497(100%)	--	--	100%

Table 2: 1:24,000-Scale Revision
Estimated Production (Sq. Mi.)

State	FY 1982	FY 1983
ALABAMA	1,140	2,050
ALASKA	--	--
ARIZONA	2,760	2,310
ARKANSAS	2,130	1,000
CALIFORNIA	2,590	1,280
COLORADO	1,540	4,620
CONNECTICUT	--	1,030
DELAWARE	1,808	510
FLORIDA	3,300	5,920
GEORGIA	510	3,760
HAWAII	2,510	1,200
IDAHO	970	--
ILLINOIS	910	--
INDIANA	2,330	2,000
IOWA	--	2,220
KANSAS	1,250	460
KENTUCKY	2,390	3,420
LOUISIANA	--	60
MAINE	--	--
MARYLAND	680	170
MASSACHUSETTS	--	570
MICHIGAN	570	510
MINNESOTA	850	460
MISSISSIPPI	3,950	3,000
MISSOURI	3,390	2,310
MONTANA	1,930	340
NEBRASKA	--	--
NEVADA	850	3,390
NEW HAMPSHIRE	60	--
NEW JERSEY	1,900	1,000
NEW MEXICO	850	2,020
NEW YORK	740	3,760
NORTH CAROLINA	2,850	2,390
NORTH DAKOTA	--	--
OHIO	2,160	2,160
OKLAHOMA	1,850	1,000
OREGON	970	--
PENNSYLVANIA	3,470	2,000
RHODE ISLAND	--	--
SOUTH CAROLINA	--	1,480
SOUTH DAKOTA	--	--
TENNESSEE	280	--
TEXAS	10,970	9,210
UTAH	--	--
VERMONT	--	--
VIRGINIA	990	1,460
WASHINGTON	2,050	1,600
WEST VIRGINIA	2,850	1,250
WISCONSIN	2,680	5,070
WYOMING	3,320	3,000
PUERTO RICO	1,250	1,140

The objective of the revision program is to keep the 1:24,000-scale map series up to date. For State coverage, see 1:24,000-scale topographic mapping.

Table 3: ORTHOPHOTOQUADS

State	Current Estimated Coverage	Estimated Production FY 1982	Estimated Production FY 1983
ALABAMA	10%		20
ALASKA 15-min.	1%	* 40	200
ARIZONA	95%	80	100
ARKANSAS	35%	20	20
CALIFORNIA	75%	260	280
COLORADO	40%	350	200
CONNECTICUT	100%	120	120
DELAWARE	--	5	--
FLORIDA	10%		
GEORGIA	10%	20	
HAWAII	100%		
IDAHO	90%	200	150
ILLINOIS	25%	20	20
INDIANA	--		
IOWA	10%		
KANSAS	5%		
KENTUCKY	5%	40	60
LOUISIANA	50%		
MAINE	85%	60	60
MARYLAND	5%		10
MASSACHUSETTS	100%		
MICHIGAN	50%		
MINNESOTA	10%		
MISSISSIPPI	15%		
MISSOURI	25%	80	60
MONTANA	75%	120	90
NEBRASKA	15%		
NEVADA	90%	140	50
NEW HAMPSHIRE	60%	40	
NEW JERSEY	5%		
NEW MEXICO	50%	50	160
NEW YORK	5%	110	140
NORTH CAROLINA	100%	180	200
NORTH DAKOTA	15%		
OHIO	--		
OKLAHOMA	10%		
OREGON	85%	170	150
PENNSYLVANIA	15%	100	80
RHODE ISLAND	100%		
SOUTH CAROLINA	20%	10	20
SOUTH DAKOTA	40%		
TENNESSEE	10%	15	100
TEXAS	10%	200	200
UTAH	85%	400	300
VERMONT	20%	50	20
VIRGINIA	10%	150	200
WASHINGTON	30%	40	40
WEST VIRGINIA	90%	80	50
WISCONSIN	10%		
WYOMING	85%	50	50

In addition, GS is providing several hundred non-standard orthophoto products for BLM in Alaska.

Table 4: 1:100,000-scale Intermediate-Scale Topographic Map Series

State	Current Estimated Coverage	FY 1982 Estimated Production (Sq. Mi.)	FY 1983 Estimated Production (Sq. Mi.)	Estimated Coverage End of FY83
ALABAMA	30%	4,800	2,100	40%
ALASKA	0	0	0	0
ARIZONA	10%	22,500	41,000	60%
ARKANSAS	0	1,900	5,800	10%
CALIFORNIA	20%	21,700	29,300	50%
COLORADO	30%	25,900	15,100	60%
CONNECTICUT	0	600	900	30%
DELAWARE	0	0	0	0
FLORIDA	70%	7,600	0	80%
GEORGIA	30%	12,600	0	50%
HAWAII	100%	0	0	100%
IDAHO	30%	5,000	17,100	50%
ILLINOIS	5%	1,800	1,900	10%
INDIANA	0	1,800	1,100	10%
IOWA	5%	1,800	1,800	10%
KANSAS	0	4,000	21,800	30%
KENTUCKY	10%	9,800	2,900	40%
LOUISIANA	5%	10,000	13,200	50%
MAINE	0	4,100	1,700	15%
MARYLAND	0	1,500	1,800	30%
MASSACHUSETTS	0	500	400	10%
MICHIGAN	5%	5,500	5,000	20%
MINNESOTA	10%	0	0	10%
MISSISSIPPI	0	5,400	13,600	40%
MISSOURI	5%	6,500	16,000	30%
MONTANA	30%	12,900	4,800	40%
NEBRASKA	10%	1,800	0	12%
NEVADA	40%	11,500	9,100	55%
NEW HAMPSHIRE	0	0	0	0
NEW JERSEY	0	0	2,500	30%
NEW MEXICO	50%	15,300	11,700	70%
NEW YORK	0	0	0	0
NORTH CAROLINA	5%	200	4,600	15%
NORTH DAKOTA	40%	3,200	3,200	50%
OHIO	0	1,100	4,400	10%
OKLAHOMA	5%	3,800	1,900	10%
OREGON	30%	9,200	11,900	50%
PENNSYLVANIA	5%	5,500	800	30%
RHODE ISLAND	0	0	0	0
SOUTH CAROLINA	5%	2,700	0	10%
SOUTH DAKOTA	20%	1,200	8,500	30%
TENNESSEE	60%	500	200	62%
TEXAS	0	17,000	8,300	10%
UTAH	60%	5,300	7,500	70%
VERMONT	0	0	0	0
VIRGINIA	5%	2,200	1,900	10%
WASHINGTON	60%	3,500	16,100	100%
WEST VIRGINIA	5%	4,600	1,200	25%
WISCONSIN	20%	0	0	20%
WYOMING	70%	12,100	3,600	80%

Question. Where are these latter areas?

Answer. Areas to be studied, which have been identified at meetings between scientists of the U.S. Geological Survey and State Geological Surveys, that have high priority include the Newark Mesozoic graben in New Jersey and the Highlands Mountains area, south of Butte, Mont. These areas are important to filling gaps in the geologic framework so that regional syntheses can be made that will aid in the exploration for base metal deposits.

Question. What are the ongoing mission-oriented programs that would be enhanced?

Answer. Mapping in an area near Prescott, Arizona, that lies across the Colorado Plateau-Basin Range boundary will contribute to the Strategic Minerals Program and to mineral assessment work in the nearby Needles 2° quadrangle. Mapping in the area near Driggs, Idaho, in the Western Overthrust belt will contribute to the Oil and Gas Resources Program and possibly the Coal Program, as well as CUSMAP projects.

Question. Increases of $500,000 are requested for mineral resource surveys in Alaska and an additional $500,000 increase is requested for surveys in the conterminous United States. How can these programs proceed when the basic mapping program for public lands in the west is being cut back as discussed on pages 33 and 34 of the justification?

Answer. The basic mapping program discussed on pages 33 and 34 is directed toward producing topographic maps. The increases are for geologic mapping and mineral resource assessments. As long as topographic maps are available for the areas that will be studied geologically--and they are already available--the cuts in the topographic mapping program should have little effect on the programs receiving the increases.

Question. At page 105, the justification states that 5 cost-sharing cooperative programs were initiated in 1982. What are the five States, and how much of the funding was put up by each State and how much was put up by the Geological Survey?

Answer.

State	State Funding	USGS Funding
Colorado	$ 6,780	$ 90,000
Utah	2,655	53,000
Montana*	34,300	98,000
New Mexico	18,440	95,000

*Two of the five projects are in Montana.

Question. What is the likelihood of further expansion of the cost-sharing program in fiscal year 1983?

Answer. New programs may be initiated with Wyoming and North Dakota, and existing programs with Montana and New Mexico may be expanded depending upon fiscal resources.

Question. For the coal resource data system, the justification indicates that data entry will be accelerated by cost-sharing cooperative agreements with 12-14 State geological surveys.

What are the States and how much will each State contribute and how much will the Survey (NCRDS) contribute?

Answer.

(in thousands of dollars)

	FY 82		FY 83	
	NCRDS	State	NCRDS	State
Alabama	$ 40	$ 29	$ 60	$ 35
Arkansas	15	5	25	10
Colorado	51	7	85	15
Indiana	46	15	60	18
Iowa	20	10	25	11
Kansas	35	11	45	15
Kentucky	64	180	85	170
Missouri	65	18	75	20
Montana	80	24	92	28
New Mexico	60	7	88	11
Pennsylvania	80	85	85	90
Texas	50	10	60	12
Utah	40	5	70	10
Virginia	50	25	70	30
West Virginia	68	20	75	25
Subtotal	$ 764 (63%)	$ 451 (37%)	$ 1000 (67%)	$ 500 (33%)
Total	$ 1215		$ 1500	

Question. A high dust cloud has sparked a great deal of curiosity over the past month. A conclusion was finally reached that it probably was formed by an undetected volcanic eruption.

What is the Survey's estimate of speculation as to when and where that volcano erupted?

Answer. There appear to be two possible sources: Nyamuragira volcano in northeastern Zaire, and Pagan volcano, in the Marianas Islands in the western Pacific. Which of the two is the most likely source remains unresolved at present. Nyamuragira was active between December 25, 1981 and January 14, 1982, sending an ash and cinder plume to 6 km elevation and causing considerable local damage to vegetation and killing many animals. No deaths or injuries to humans were reported. Although the ash plume did not reach the stratosphere, sulfurous gases could very well have. Calculation of the speed eastward drift of such a cloud would bring it over Japan and Hawaii at about the times reported.

Pagan volcano has been intermittently active throughout 1981. Its first major eruption occurred in May 1981; it was also reportedly active in November 1981 and again in January and February 1982. During February 8-24, eruptions occurred at the rate of at least 5 per day. Although ash and scoria was ejected to only 2 km elevation, gases could have been carried much higher.

Question. For energy-related hazards program, $8,576,000 is requested, an increase of $350,000. This increase will permit the Survey to meet obligations in areas of highest priority--the deep water parts of developed planning areas.

Where are these planning areas?

Answer. The increase restores the Energy-related Hazards Investigations Program to its FY 1981 level and will enable the Survey to begin regional geohazards assessments in deep water portions of OCS planning areas. The size of lease offerings have increased severalfold according to the objectives of the streamlined leasing program, and the addition of new acreage has been in water depths ranging from 2000 m to 6000 m. The Geological Survey has very little information seaward of 2500 m water depth, e.g., in the Atlantic and the Gulf of Mexico OCS areas. Therefore, the first effort in FY 1983 will be made to expand the geohazards investigations in the Gulf of Mexico. The choice of the Gulf over other areas was made on the basis of highest number of sales in that area over the next five years, and the anticipated petroleum potential of the deep-water parts of the Gulf.

WATER RESOURCES INVESTIGATIONS

Question. For the acid rain program, an increase of $1 million is requested to provide a total of $2,448,000. Where are the monitoring stations now located?

Answer. Several agencies, both public and private, operate stations collecting atmospheric deposition samples. The largest single existing network is the National Atmospheric Deposition Program, which now has about 100 stations nationwide. Stations in numerous smaller networks may total another 100. Of the existing stations, perhaps 70 percent are located east of the Mississippi River where most of the acid rain problems have been observed. Stations are scattered throughout the Rocky Mountains and the Pacific Coast, but areal coverage is sketchy.

The Geological Survey is lead agency for Task Group D, Deposition Monitoring, of the Interagency Task Force on Acid Precipitation. The Task Group is designing a national monitoring network called the National Trends Network (NTN), consisting of up to 150 stations in the conterminous United States. About 100 of these will be stations in existing other Federal or private agency networks that are suitably located for the objectives of the NTN. Probably as many as 50 stations will be constructed in areas where none exist at present. The objective of the NTN is to provide a regional and national picture of the composition of atmospheric deposition. Sites will be located so that the chemical composition of the precipitation collected will not be unduly influenced by local sources, but will reflect, to the extent possible, regional conditions. Suitable locations are being determined by the Deposition Monitoring Task Group with the assistance of a contractor. The Task Group is using information on the patterns of chemical composition in atmospheric deposition obtained from past and present data to determine where sites should be located. Priority locations should be identified by the third quarter of FY 1982, and decisions made as to how many stations of established public and private networks will be suitable.

Question. What is involved in the development of a laboratory quality-assurance program?

Answer. The Geological Survey has accepted the responsibility for providing analytical quality-assurance support to laboratories servicing the principal atmospheric deposition networks in North America. This was done in order to assure that the data in a national data base for atmospheric deposition are of consistent quality. At the present time, the quality-assurance program involves the National Atmospheric Deposition Program, the Multistate Atmospheric Power Production Pollution Study (MAP3S) Network, and two Canadian provincial networks. This activity is in addition to the normal analytical quality assurance provided to atmospheric deposition investigations conducted by the U.S. Geological Survey in cooperation with States.

The quality-assurance program currently involves the operation of a "blind-sample" program, a program for assessment of the quality of measurements made in the field by site operators, documentation of analytical methods, development of reference materials for use in assessing analytical quality, and the determination of the variability associated with sampling. In addition, because of the nature of atmospheric deposition samples, an active analytical methods development research program is underway to provide the necessary levels of detection that are generally unavailable by conventional analytical methods.

Quality-assurance activities are coordinated with other Federal agencies in the United States and with the provincial and national government agencies in Canada to avoid duplication of effort and to provide technical consultation.

Question. Where will the laboratory be located?

Answer. Present plans call for three laboratories to perform analyses of atmospheric deposition samples—the Central Analytical Laboratory of the Illinois Geological Survey in Urbana and the Geological Survey's National Water-Quality Laboratories in Arvada, Colorado, and Doraville, Georgia. The Central Analytical Laboratory has been performing analyses for the National Atmospheric Deposition Program for several years and has considerable experience in analysis of samples with low concentrations of chemical constituents. Their performance in the quality-assurance program has been excellent. The Illinois laboratory will continue to perform analyses of samples collected at stations in the NTN that are incorporated from the National Atmospheric Deposition Program.

The Geological Survey's National Water-Quality Laboratories will be analyzing samples from most of the new stations in the NTN, which will be constructed and begin operation in FY 82 and 83. The reasons for having three laboratories with analytical capability are 1) to have multiple backups in case one laboratory would have to shut down, 2) to provide for analytical capability during times of heavy sample flow, and 3) to provide multiple outlets for expansion.

Question. Who will operate the laboratory?

Answer. As indicated in the response to the last question, laboratories will be operated by the Illinois Geological Survey and the U.S. Geological Survey's Water Resources Division.

Question. How much of the total of $2,448,000 is contracted?

Answer. Present plans call for an interagency agreement with the National Atmospheric Deposition Program for equipment upgrading and partial operation of up to 100 stations in the program, which qualify as NTN sites. The funds involved in this interagency agreement have not been accurately determined, but up to $645,000 is the current estimate.

Question. With whom is it contracted?

Answer. An interagency agreement will be written with the National Atmospheric Deposition Program.

Question. What is the Geological Survey's opinion of the research finding that contaminants have signatures that can be traced to the point of origin?

Answer. The question may refer to an article in Science (Volume 215, Page 881, February 12, 1982) entitled, "Tracing Sources of Acid Rain Causes Big Stir." Dr. Kenneth Rahn at the University of Rhode Island has found that the manganese to vanadium ratio (Mn/V) in particulate emissions is high from the burning of coal (1 to 10) and low from the burning of oil (0.1 to 0.2). The Mn/V ratio tends to be greater than 1 in particulate material collected from air in the Midwest and less than 1 in the East. Rahn has used the Mn/V ratio to show that the air over portions of New England and New York comes from different places at different times.

This finding could be very useful in identifying the general regional source of air masses residing over a particular region under particular atmospheric conditions. Chances are that the Mn/V signature will not be precise enough to allow identification of an emission source to the local level because the ratios in different coals do not vary widely enough to give adequate separation. Nevertheless, Dr. Rahn's observation should be of great value in a number of other investigations, and the Mn/V ratio could prove to be precise enough to identify emission sources at a subregional level, that is, the Ohio Valley (subregional) as opposed to the Midwest (regional).

Data collected by the Geological Survey on about 200 bulk precipitation samples collected in the Northeast and northern Midwest during the winter of 1980-1981 support Dr. Rahn's observations. There was a general trend toward decreasing Mn/V ratios in samples moving eastward from Minnesota to Maine, although there were some unexpectedly high values in New York, which are difficult to explain.

Question. $37,929,000 is requested for the national water data system Federal-State Cooperative Program.

What are the serious water-quality issues and problems that will be addressed?

Answer. Of the numerous water-quality issues to be addressed by the Federal-State Cooperative Program, the most serious include ground-water contamination, stream-quality deterioration, and the impacts of energy-resources development. Areas of particular concern regarding stresses on water quality include: mining and processing of coal, metals, and oil shale; synthetic-fuel development; acid rain; the effects of nutrients on lakes and wetlands; and the disposal of liquid and solid wastes.

Question. For the water-use program, a request of $3,182,000, the FY 1982 base level is requested. In 1982 and 1983, at the current funding level, the Program will be operating in 47 States.

Which States will not be involved?

Answer. The following States are not involved in the Program: Delaware, New Hampshire, and Vermont.

Question. The table at page 160 for 1981 shows that 49 States were involved. Does that mean that two States dropped out after 1981 or does it mean that there was a duplication between some of the categories?

Answer. Two States dropped out of the Program in 1982, Delaware and Vermont.

Question. Please provide a table, by State, showing the funding level for each State, the length of time the State has been in the Program, and the operational level in each State, if that is different than the funding level.

Answer. Table 5 entitled "National Water-Use Information Program" shows Federal funding level for FY 1982 and the year each State program began. Operational level of program in each State is twice the funding level shown in the table.

Table 5: NATIONAL WATER-USE INFORMATION PROGRAM

STATE	FUNDING LEVEL-FY 1982 (Federal Side Only)	BEGINNING YEAR
ALABAMA	100,000	1979
ALASKA	54,000	1978
ARIZONA	47,000	1979
ARKANSAS	50,000	1979
CALIFORNIA	40,000	1978
COLORADO	121,300	1978
CONNECTICUT	80,000	1978
DELAWARE	0	1981
FLORIDA	178,500	1978
GEORGIA	91,000	1978
HAWAII	40,000	1979
IDAHO	70,000	1979
ILLINOIS	70,000	1978
INDIANA	30,000	1980
IOWA	78,700	1979
KANSAS	103,600	1978
KENTUCKY	69,800	1979
LOUISIANA	65,000	1979
MAINE	12,750	1980
MARYLAND	112,250	1979
MASSACHUSETTS	26,400	1979
MICHIGAN	87,750	1978
MINNESOTA	74,375	1979
MISSISSIPPI	49,600	1978
MISSOURI	64,900	1979
MONTANA	45,000	1979
NEBRASKA	50,000	1979
NEVADA	20,000	1979
NEW HAMPSHIRE	0	----
NEW JERSEY	21,250	1979
NEW MEXICO	65,000	1978
NEW YORK	134,662	1979
NORTH CAROLINA	32,000	1979
NORTH DAKOTA	59,000	1978
OHIO	72,651	1978
OKLAHOMA	40,000	1979
OREGON	2,000	1979
PENNSYLVANIA	143,112	1978
RHODE ISLAND	12,500	1980
SOUTH CAROLINA	80,400	1979
SOUTH DAKOTA	80,000	1979
TENNESSEE	47,000	1978
TEXAS	55,000	1978
UTAH	123,100	1978
VERMONT	0	1980
VIRGINIA	72,500	1979
WASHINGTON	122,500	1978
WEST VIRGINIA	64,100	1978
WISCONSIN	81,100	1978
WYOMING	10,000	1981
PUERTO RICO	32,200	1978
TOTAL	$3,182,000	

LAND RESOURCE DATA APPLICATIONS

Question. For land resource data applications, $635,000 is requested, a reduction of $200,000 below the base level. The justification at page 222 indicates that the decrease will reduce workshops, studies, and information transfer activities. These workshops and transfer activities are described at some length in the annual report beginning at page 115 and continuing through 118.

Were the results described in the annual report undesirable?

Answer. The Geological Survey believes that the experimental projects in technical information delivery described in the annual report produced desirable results. These and other projects carried out through the Land Resources Data Applications subactivity in the past have developed and demonstrated a variety of ways in which effective communication of information between research scientists and the public and private users who need this information can be carried out. Such projects, which seek to identify new opportunities to incorporate earth-science information into resource-related decisions and to demonstrate applications of earth-science information, contribute significantly to improving the factual basis upon which resource decisions are made.

Question. Is that why the program is being reduced by one-fourth?

Answer. No. The reduction in the Land Resources Data Applications subactivity is proposed to partially accommodate the funding requirements of higher-priority programs. This reduction does not reflect a diminution of the Geological Survey's interest in and commitment to ensuring that the information it produces is readily available and useful to public and private users. Rather, the success of the experimental and demonstration projects carried out in this subactivity has led to their adaptation and incorporation into other Geological Survey programs. Thus, the information transfer and applications functions formerly carried out primarily through the Land Resource Data Applications subactivity have been largely integrated with, and will continue to be carried out as, basic elements of Geological Survey programs funded under other budget subactivities.

Question. How will the objectives described in the annual report be carried out at the reduced level?

Answer. The basic objective of the information-transfer experiments described in the annual report is to improve the level of knowledge and understanding of resource and land-use issues by planners, decisionmaking officials, and the general public. The reduced level of funding will continue to provide support for innovative projects aimed at developing better methods for delivering Geological Survey information to these users.

STANDARD LEVEL USER CHARGES (SLUC)

Question. At page 219 the table shows the requirements for standard level user charge for 1983 is $11,784,000. The object class table at page 25 shows that the amount of SLUC for this appropriation is $33,292,000. Why is increased SLUC requested for some programs, but no reductions shown where program reduction and staff reductions are shown?

Answer. The SLUC is based on GSA's system of charging for space that reflects the fair market value of space by type (office, warehouse, lab, etc.) Because Federal SLUC reflects private sector rates a rapid escalation in such charges is now being observed, a trend GSA expects to continue for some time. Thus, for programs which remain about the same size, a 30 percent increase in SLUC per year is not unexpected. Some SLUC rates for other agencies noted in media accounts are increasing over 100 percent per year.

When a relatively small program contraction occurs the amount of space "freed up" may not be of sufficient size to warrant GSA action for disposal. In some cases because of lease provisions unless an entire building or building floor is vacated GSA (and the agency involved) must continue to make rental payments. SLUC charges are impacted by relatively large space management actions and unfortunately are not ordinarily influenced by small scale program reductions.

Question. What services does the Survey receive from GSA in return for the SLUC cost?

Answer. The GSA provides services comparable to those received in the private sector such as, janitorial services, heating and cooling, maintenance and protection services. Charges are based on one shift of operation, 8 1/2 hours per day. Space which requires such services beyond the normal 8 1/2 hour day is charged overtime rates based on utilities used and other required support.

Question. What assistance is provided to the Survey in arguing against these seeming excessive SLUC applications by GSA?

Answer. The USGS and the Department are very concerned about the rapid increases associated with SLUC costs. The situation has been discussed with budget staff members on a number of occasions. Because SLUC rates vary from bureau to bureau and office to office based on geographic locations (vis-a-vis fair market rates) decisions to make SLUC appeals rest with the individual bureaus and principal offices of the Department. Under the provisions of Federal Property Management Regulations (Title 41, Section 101-21.606) agencies may appeal SLUC rates.

The burden of proof relative to SLUC appeals is borne by the agencies. Because of this, such appeals are seldom pursued. Even when SLUC appeals are made, available information indicates that decisions favorable to agencies are seldom made by GSA.

CONSERVATION OF LANDS AND MINERALS

Question. For the regulatory program of the OCS lands, $31,409,000 is requested, a reduction of $845,000 below the 1983 base level. In order to achieve increase workload, less effort will be provided for pipeline approvals, unit approvals, and natural gas pricing category determinations.

--Why is this trade-off made?

Answer. The termination of Reservoir Shut-In/Efficient Operations will result in the end of workload associated with the examination and verification of shut-in wells and field studies. However, the traditional workload factors that are noted on page GS-175 show a slight rise from FY 1982 for the Regulation of OCS Oil and Gas Operations. The work related to pipeline approvals, unit approvals, and natural gas pricing category determinations will be accomplished less timely than the workloads that are considered more urgent to support industry operations. Nevertheless, the workload will be accomplished by the Minerals Management Service in accordance with 30 CFR 250.18.

Question. Particular emphasis will also be placed on the assessment of hazards, geologic hazards post-sale rather than pre-sale.

-- Does this make sense?

Answer. Although the tract-specific hazards assessments have been moved to the post-sale phase, the USGS will continue making pre-sale assessments of geohazards on a planning area-wide basis for input to the EIS. The resulting data and analyses will be made available in the Geology Reports released 12 months prior to the Call for Information. Post-sale analyses will be conducted by MMS, but only over tracts leased, using data obtained from the lessees under permit regulations. The resulting tract-specific analyses will be used to identify geohazards that could affect drilling or development operations in leased tracts.

Question. -- What if the hazards are such that the sale should not be made in the first place?

Answer. The nature, extent, or severity of a hazard will be taken into account during the lease planning phase, specifically at the time of defining alternative areas for leasing. Furthermore, the large planning areas are very unlikely to be completely hazardous everywhere.

Question. What if a sale is made to a company whose oil source is such that production is needed so badly that the risk is ignored?

Answer. There is a possibility that hazards could be detected postsale which would preclude exploration/development of certain leases. In this case, the Outer Continental Shelf Lands Act Amendments of 1978 provides the means for the Secretary to cancel the lease and compensate the lessee.

After a lease sale, lessees are required to conduct site-specific hazards surveys over their lease and provide the Minerals Management Service with the resulting data and analysis prior to receiving authorization to drill. Permits to drill are issued only if the Minerals Management Service determines that developing the tract can be done safely.

Question. At page 175, an increase in workload of oil and gas industry submissions will be offset by doing less work in pipeline approvals, unit approvals, and natural gas pricing category determinations.

In the event the additional applications from oil and gas industry are not submitted, will the available funds be used for pipeline approvals, unit approvals, and natural gas pricing category determinations?

Answer. Yes. However, the increase in lease activity is a relatively firm projection based on current industry information.

Question. Is this one of the areas that would be funded from the royalty revenues under the proposed legislation alluded to by the Secretary in his appearance before the Subcommittee on the royalty management hearings of March 23rd?

Answer. No, it is not.

Question. According to the justification at page 176, one aspect of the regulatory program which will be terminated is that which provides for examination and verification of the status of shut-in wells, etc.

Why is this program being terminated?

Answer. The Reservoir Shut-In/Efficient Operations Program is being terminated in FY 1983 because the program has not identified significant opportunities for additional oil and gas production to date. The only aspect of the program that will not be terminated will be for those applications involving suspensions of production, enhanced recovery, MER's/MPR's, and gas flaring. This effort will be absorbed by Regulation of OCS Oil and Gas Operations. The estimated outputs for these items in FY 1983 are noted below:

	FY 1981	FY 1982	FY 1983
Suspensions of Production --	100	100	100
Enhanced Recovery Operations Analyses -----------------	150	150	150
MER/MPR Review -------------	12,000	12,000	12,000
Gas Flaring Approvals ------	300	300	300

Question. One of the requirements in the OCS oil and gas operations program is that best available and safest technologies (BAST) be used.

Are there any actions being taken by the Department or the Minerals Management Service that will provide for backing off that legislative requirement?

Answer. We have contended in our OCS Orders that compliance with the Orders constitutes fulfillment of the BAST requirements. In this sense, the application of BAST is standard operating practice. Our program to determine the effectiveness and applicability of new technologies compliments this program and, to date, has not presented burdensome requirements on lessees.

Question. At page 183 where the alleged justification for the reduction is shown, it is stated that the current shut-in program has not identified significant opportunities; that a reduction of $1,845,000 will result from the termination of this program.

Is that how much is in the program?

Answer. The total program for Reservoir Efficient Operations/Efficient Operations is $1,845,000.

Question. The justification goes on to say that an increase of $1 million is proposed to address the needs of enforcement and compliance, training, and accident investigations.

Where will that program be done?

How will the $1,000,000 be used? Where is it justified?

Answer. The needs for enforcement and compliance, training, and accident investigations will be accomplished under the Regulation of OCS Oil and Gas Operations Program.

The $1.0 million will be used to increase compliance with the OCS Lands Act Amendments of 1978 through improved inspection and accident investigation programs and through an expanded information system. This increased compliance will be realized through expenditures as follows:

1.	Accident Investigation Training	$ 250,000
2.	Safety Information System	250,000
3.	Additional Investigations	112,000
4.	Training for New Engineers	135,000
5.	Training for New Inspectors	253,000
		$ 1,000,000

Extensive accident investigation training is needed so that all personnel directly involved with investigations will have a better understanding of step-by-step procedures, the gathering and documentation of evidence, and proper reporting. Such training will require 5-day courses for 120 or more persons.

The present Events File for the gathering of accident and spills data is essentially Gulf of Mexico data; and it is accessed through GIPSY, an older data system. The Events File will not be an acceptable means of improving regulations until completely revamped under a new program with additional data input from all Regions. A contract will be necessary to do this.

The Minerals Management Service must conduct some nonoperational accident investigations. An estimated twenty minor and two major accidents will be involved.

Training of new engineers is needed because many of them are not petroleum graduates, and many are not near a full performance level. The training needed is available through independent firms or at many of the petroleum institutions. An estimated 50 persons will be enrolling in at least one course.

A training program is needed for newly hired and/or inexperienced inspectors. Many inspectors without oilfield experience are taught only through on-the-job training. Improving this procedure will require developing a new program and training 30 or more persons.

Question. Under the offshore geologic survey's program of the geologic and mineral resource survey's and mapping activity, a note was shown at page 126 that indicated that the outputs to meet the requirement of the 1981 leasing schedules assumed additional resources would be made available from the OCS resource evaluation program. This program is described on page 184 and an increase of $3,600,000 is requested for that program.

-- Why would the increases be requested here if the fund applications are going to be made under the offshore survey program?

Answer. The development of a streamlined leasing process on the OCS was a joint effort between BLM and the former Conservation Division and the Geologic Division. This effort was proceeding at the same time that the FY 1983 Budget Justification was being prepared, hence, it was decided that the Budget Justification be prepared along existing Budget activity lines.

An increase of $1 million is requested for Area Identification and Evaluation (OCS Resource Evaluation). All funds requested for this program, including the increase, are needed to acquire the necessary data to conduct area identification and tract evaluation for sales scheduled in FY 1983 and FY 1984 under the accelerated OCS leasing program. These funds are applicable only to any efforts in the subactivity, "Offshore Geologic Surveys," which directly support the prelease program. The balance ($2.6 million) of the $3.6 million increase is requested to support the Reserve Inventory Program and is required for that function.

Question. At page 185 is the proposed 5-year OCS leasing program. There are two northern California sales identified. No. 73, which is scheduled for sale in January of 1983, and Sale No. 91, which is scheduled for sale in March 1985. Which of these sales includes the four northern basins which are precluded from activity in fiscal year 1982?

Answer. Sale Nos. 73 and 91 encompass the planning areas which include the four northern basins which are precluded from activity in FY 1982. A final decision on which basins are to be included has not yet been made. (On May 7, 1982, the Secretary decided to exclude the four northern basins.)

Question. At page 186 the January 1983 sale is noted to have been indefinitely postponed. Which is the accurate date for that sale?

Answer. Since the publication of the Budget Justification, F.Y. 1983, a new leasing schedule of March 1982 has been proposed. According to this new leasing schedule, Sale Nos. 73 and 91 are scheduled for September 1983 and September 1985, respectively. The sale dates in the Budget Justification were based on the "Proposed 5-year OCS Oil and Gas Leasing Schedule - July 1981."

Question. Again at page 190 the justification includes discussion of the "streamlined procedures" indicating that tract-specific hazards assessment will be conducted postsale. In the personal and professional judgment of the Survey staff, will the industry work be adequate?

Answer. Only the Minerals Management Service (MMS) presale program of contracting for tract-specific hazards data will be discontinued. The MMS will be able to select from presale geohazards data under terms of permits and regulations where available and will receive all hazards data acquired through the regional geohazards program conducted by the U.S. Geological Survey. In addition, the MMS is in possession of substantial amounts of hazards data which were acquired for previous sales. The resulting data base will be used to properly analyze site-specific surveys provided by lessees. In the event where the MMS is not in possession of adequate hazards data near a lease, provisions exist to require the lessee to provide additional data outside of their lease.

Question. The justification at page 193 in explanation of the increase of $3,600,000 says that the increase of $2,600,000 for the Reserve Inventory Program was deferred in FY 1982. Were funds provided in FY 1982 to initiate the Reserve Inventory Program?

Answer. Funds were provided in FY 1977 to initiate the Reserve Inventory Program. A request for an increase in resources in FY 1982 was deferred. A decrease of $600,000 in FY 1982, which was a reduction in the FY 1981 level of the program, was used to support the Secretary's accelerated OCS leasing program. The Reserve Inventory Program is falling far behind schedule. The rapidly expanding rate of new field discoveries (50-60 per year) continues to exceed the capability of Minerals Management Service to perform timely reserve estimates on a reservoir by reservoir basis.

Question. The justification goes on to say that the increase is made partially possible by redirecting the resources from the Reservoir Shut-In/Efficient Operations Program which will be terminated. Doesn't the justification at page 183 show $1 million of that $1,845,000 being applied against enforcement and compliance, training, and accident investigation?

Answer. The various statements contained within the Budget Justification are intended to convey a sense of priority regarding the use of funds already available to the Minerals Management Service versus additional funds which would be required to meet various new programmatic responsibilities. Because of the deferral of effort in the Reserve Inventory Program during FY 1981 and FY 1982, the Minerals Management Service proposed that the cost savings made available from termination of the Reservoir Shut-In/Efficient Operations Program should be made available to the Reserve Inventory Program. The statements contained in the Budget Justification are accordingly an expression of the very high priority placed on reestablishing the Reserve Inventory Program to a level which will meet programmatic requirements.

Question. Of the $3,600,000 increase, $3,419,000 is budgeted to be contracted out.
--With whom will this work be contracted?
--Why are three positions being cut from the existing program?
--If fewer positions are being used, why is there a need to increase the standard level user charges, particularly if the program will be contracted out?

Answer. The required services will be offered for competitive bid to qualified contractors and ultimately awarded at the conclusion of the contracting process. It is, therefore, not possible to identify these particular firms until the point of award. For example, data must be acquired through qualified contractors to support the accelerated OCS leasing program.

There is no programmatic reduction of positions to the Reserve Evaluation function. A reduced allocation of FTE staff-years to the Minerals Management Service resulted in reductions in various support functions allocated by budget activity and program element.

The increase in standard-level user charges (SLUC) represents the increase in space costs allocated to the MMS. The SLUC allocation is based on a standard formula distributed by budget activity.

Question. For the oil and gas program, $23,594,000 is requested, an increase of $1,500,000. The justification at page 195 says that in 1982, 50 additional positions were made available for this program.

-- Are those 50 reflected in the 479 or does it mean that the number will go to 529?
-- If the 479 includes the 50, why is that still lower than the 506 full-time equivalent that were shown in the 1982 program?
-- What was the staffing level in 1981 for this program?
-- Of the $1,500,000, $1,283,000 will be contracted out. With whom will those funds be contracted?

Answer. The 50 additional positions for Onshore oil and gas inspectors were made available from overhead functions and other lower priority programs within the Conservation of Lands and Minerals budget activity and the Minerals Management Service organization. The additional 50 positions are included in the FY 1982 FTE-T 506 as well as the FY 1983 base and estimate FTE-T 479.

The downward adjustment in funding and FTE-T between FY 1982 Appropriation Column and FY 1983 Base Column is a result of the transfer of funds and positions previously included for "Common Program Services" which are now reflected as a separate line item within the General Administration budget activity.

The direct full-time staffing level to the program in FY 1981 was 379 as compared to 429 FTP's in FY 1982.

The funding requested for the "other services" object class will be used for increased fixed wing and helicopter aviation support. When combined with the additional 50 oil and gas inspectors, the increased aircraft support is intended to enhance the onsite inspection effort for both random site security inspections as well as scheduled drilling and production inspections to protect the public and Indian interests. The contracting of these services will be accomplished competitively through DOI, Office of Aircraft Services. Ultimate awardees contracts cannot be identified at this time.

Question. At page 199 under the justification for the National Petroleum Reserve in Alaska (NPRA), is the statement "the objective of the private leasing of NPRA is to facilitate the discovery of energy resources in conformance with a mandate of existing and proposed legislation..."

-- What is the proposed legislation identified?

-- Why would an objective be in anticipation of proposed legislation?

-- Suppose the legislation is rejected?

Answer. The justification on page 199 is inaccurate with respect to the statement "in conformance with a mandate of existing and proposed legislation." The statement should have read "in conformance with a mandate of existing legislation." The use of the word "proposed" legislation appears to be a carryover from the FY 1982 Budget Justification in which reference was made to the then proposed NPRA legislation. However, once the act was passed and funds were appropriated in FY 1982, the term "proposed" should have been eliminated from the FY 1983 Budget Justification.

Question. For the coal program $9,579,000 is requested, a reduction of $3 million and 39 positions below the 1983 base level. The justification indicates that fair market value determinations will be made from data acquired by industry under exploration licenses and provided to the Federal government. How will this data be verified? Are we letting ourselves in for a repeat of the problem we have on the Federal and Indian lands by relying on unverified industry data?

Answer. The reduction of budget and positions, which is the subject of this question, is for the Minerals Management Service's (MMS) coal drilling program. When Congress passed the Federal Coal Leasing Amendments Act of 1976, the Secretary of Interior was authorized to impose reasonable conditions on companies conducting exploration on Federal coal lands (Section 4[b][1]) through exploration licenses. Companies are required to furnish to the Secretary all data obtained during exploration including geological, geophysical, and core drilling analyses (Section 4[b][3]). As a result, the MMS can require companies to alter drilling plans, locations, and procedures when necessary, in order to maximize the return of geological information to the Government. The MMS, as the Secretary's agent, approves the exploration plan and oversees the exploration program to ensure company compliance with the terms of the exploration plan and the license. The license holder submits to the MMS not only written information but copies of a complete suite of geophysical well logs (which are very difficult to successfully alter or substitute) and, if required, rock samples obtained by drilling.

As a condition of granting the license the Department also requires that applicants advertise for participants (much like for COST wells on the OCS) in the drilling license program. These participants share equally in the cost of the program. Thus, many of the exploratory wells are, in effect, drilled by several competitors for the same property which helps to ensure that data provided to the Government is complete and reliable. Geological and geophysical data provided by companies under the terms of exploration licenses is verified by inspecting the exploration program as it is conducted and by examining the provided data using MMS geologists and mining engineers familiar with the local geology and the existing mining operations. Coal quantity and quality determinations and engineering analyses used for fair market value determinations will be made by the MMS, not industry.

The technical data (geological and geophysical) provided by industry for the coal leasing program is much different than the production statistical data submitted for oil and gas royalty collections, and the analyses to which they are subjected are also different (geological and engineering versus accounting analysis). The MMS believes that the data is verifiable and will continue to be verified to support the Federal coal leasing program. There is little likelihood that submission of inadequate, inaccurate or falsified information will occur with the implementation of the system described above.

Question. For royalty management, $21,894,000 is requested, an increase of $6,760,000, and a reduction of 34 positions.
-- Why are the positions being reduced?

$7,229,000 worth of other services will be contracted.
-- With whom will they be contracted?
-- Why does SLUC go up if the positions come down?
-- What assurances will there be that the contracting will be accurate?

Under the original conversion schedule for transition from the old Royalty Accounting System (RAS) to the improved Royalty Management Program there was a projected, temporary overceiling staffing level as accounting offices operating under the RAS were phased out and the new system was fully implemented. As Figure C-7 page 211 in the justification depicts, this conversion period spans 2 fiscal years.

At the time the FY 1983 justification was presented, a number of other improvement initiatives to the Royalty Management program were being considered by the Administration. The Secretary testified before the House Interior Appropriations Subcommittee on March 25, 1982, and stated that the Administration was preparing a supplemental funding request for the Royalty Management Program. Accordingly, it is expected that the anomaly of a 34 position reduction will be modified once the formal resource request for further Royalty Management support is presented to the Committee.

Major items funded under the other services category consist of the Production Accounting and Auditing System development, the American Management Systems Contract, the IBS contract for operation and maintenance support, and for a microfilm support contract.

The increase in the SLUC charges result from the implementation of the new system while the old system continues. Additional space requirements for operating space and for support facilities are primarily responsible for this increase.

QUESTION SUBMITTED FOR THE RECORD BY THE HONORABLE LES AuCOIN, MARCH 31, 1982

Question.	Describe in detail the nature and purpose of the proposed study for the Eel River Basin described on page 128 of your justifications.
Answer.	The Eel River Basin on the Continental Shelf off northern California is part of the Central and Northern California OCS planning area. The Geological Survey has been studying the geohazards potential of this basin, along with other basins nearby, and the continental slope. In November 1980, a magnitude 7.0 earthquake occurred offshore the Klamath River Delta. Subsequently, the Geological Survey resurveyed part of the area and discovered a submarine landslide. The resulting geologic investigation became the first case of documenting and relating a seafloor failure to a specific earthquake event of known magnitude and distance from the landslide. The Geological Survey is now evaluating the cause-effect relationships and the effects of this event on offshore development.

Question. If an additional $2 million were provided for acid rain research, how would the Survey propose that that $2 million be spent?

What would the effect of such an increase be on accelerating the understanding needed in order to resolve the acid rain problem?

Answer. If an additional $2 million were to be provided, it could be used to augment research on the aquatic and terrestrial effects of acid rain, the measurement of trace metal concentrations in atmospheric desposition samples, and the development of methods for collection and analysis of dry deposition samples.

Research in aquatic and terrestrial effects is needed to understand conditions under which terrestrial and aquatic systems are affected and how those effects occur.

Trace metals in atmospheric deposition may 1) pose a public health problem, 2) affect aquatic or terrestrial ecosystems, and 3) be used as tracers for emission sources. Data are needed on a nationwide basis to determine whether these suppositions are true, but investigations in this area have been hampered by sampling techniques which do not assure sample integrity and by laboratory analytical methods with detection limits that are not low enough to detect the materials present. Methods for sample collection and analysis need to be developed before the data can be obtained.

It is known that the chemical constituents in dry deposition have a great effect on metal, stone, building material, and vegetation. However, there are no reliable methods available for collecting samples of dry deposition and monitoring this important component of atmospheric deposition. The development of such methods will assist in gaining a better understanding of the processes involved and of the distribution of chemical constituents of this type of deposition.

It should be noted that the FY 1983 budget request fully funds the Geological Survey's role in the National Acid Precipitation Assessment Plan developed by the Interagency Task Force on Acid Precipitation. The information provided above represents the best professional judgment of the Department on how the proposed change in the budget request would be implemented. The proposed change is not consistent with the President's budget and therefore not supported by the Administration.

HISTORY OF BUDGET REQUEST

Mr. DICKS. We also have a table that we will without objection, place into the record. It shows the history of the budget request.

[The table follows:]

U. S. GEOLOGICAL SURVEY
FY 1983 Budget Request History
(Dollars in Thousands)

Activity/Subactivity/Program Element	FY 1982 Approp.	FY 1983 Request to Depart.	FY 1983 Request To OMB	FY 1983 Request To Congress
Surveys, Investigations, and Research				
National Mapping, Geography and Surveys	76,347	75,495	70,989[a]	70,448
Primary Quadrangle Mapping	37,488	39,050	36,925	36,865
Primary Quadrangle Mapping	33,512	34,908	32,783	33,011
Modernization of Mapping Technology	3,976	4,142	4,142	3,854
Map Revision and Orthophotoquads	16,030	16,698	16,832	16,761
Revision	9,841	10,251	10,337	10,657
Orthophotoquads	6,189	6,447	6,495	6,104
Digital Mapping	3,873	--	--	--
Small, Intermediate, and Special Mapping	15,200	15,834	13,233	13,016
Intermediate - Scale Mapping	6,682	6,960	7,017	6,653
Land Use and Land Cover Mapping	3,443	3,587	1,910	2,201
Airborne Profiling of Terrain System	2,592	2,700	1,700	1,689
Small Scale and Other Special Mapping	2,483	2,587	2,606	2,473
Cartographic and Geographic Information	3,756	3,913	3,999	3,806
Geologic and Mineral Resource Surveys and Mapping	161,496	185,524	172,795	152,821
Geologic Hazards Surveys	48,008	56,008	53,469	43,455
Earthquake Hazards Reduction	32,652	37,013	34,335	30,843
Volcano Hazards	9,578	12,977	13,006	6,830
Ground Failure & Construction Hazards	2,741	2,855	2,890	2,718
Reactor Hazards Research	3,037	3,163	3,238	3,064
Land Resource Surveys	16,204	20,978	18,306	16,735
Geologic Framework	13,086	17,731	15,015	13,639
Geomagnetism	2,114	2,202	2,235	2,104
Climate Change	1,004	1,045	1,056	992

Activity/Subactivity/Program Element	FY 1982 Approp.	FY 1983 Request to Depart.	FY 1983 Request To OMB	FY 1983 Request To Congress
Mineral Resource Surveys	38,749	45,364	46,195	40,860
Alaska Mineral Surveys	8,829	9,197	9,296	9,218
Conterminous U.S. Mineral Surveys	5,036	8,245	8,354	5,545
Wilderness Mineral Surveys	8,517	8,872	8,952	8,400
Strategic/Critical Minerals	4,478	6,665	6,939	5,727
Development of Assessment Techniques	11,785	12,276	12,544	11,867
Mineral Discovery Loan Program	104	109	110	103
Energy Geologic Surveys	37,582	41,348	32,726	29,982
Coal Investigations	12,709	16,439	15,437	14,108
Onshore Oil and Gas Investigations	6,921	7,209	7,311	6,889
Oil Shale Investigations	2,279	2,374	801	813
Geothermal Investigations	7,939	8,270	6,079	6,053
Uranium/Thorium Investigations	6,774	7,056	2,098	2,119
World Energy Resource Assessment	960	--	1,000	--
Offshore Geologic Surveys	20,953	21,826	22,099	21,789
Offshore Oil and Gas Resources	11,165	11,630	11,793	11,774
Energy-Related Environ. Invest.	8,356	8,705	8,784	8,576
Marine Geology Investigations	1,432	1,491	1,522	1,439
Water Resources Investigations	106,859	124,292	118,494	112,015
National Water Data System-Federal Program	47,298	56,407	57,063	53,006
Data Collection and Analysis	14,585	15,802	16,169	15,776
National Water Data Exchange	1,236	1,288	1,319	1,239
Regional Aquifer Systems Analyses	14,624	15,233	15,590	14,585
Coord. of Nat'l Water Data Activities	883	920	942	890
Core Program Hydrologic Research	5,896	6,141	6,278	5,950
Improved Instrumentation	1,912	1,991	2,038	1,892
Ground Water Recharge	--	1,430	1,464	--
Subsurface Waste Storage	1,437	1,497	1,532	1,446

Activity/Subactivity/Program Element	FY 1982 Approp.	FY 1983 Request to Depart.	FY 1983 Request To OMB	FY 1983 Request To Congress
Flood Hazards Analysis	452	471	482	462
Water Resource Assessment	332	1,946	362	330
Supporting Services	3,539	3,686	3,772	3,572
Toxic Wastes - Ground Wtr Contamination	942	4,481	4,586	4,416
Acid Rain	1,460	1,521	2,529	2,448
Federal/State Coop Program	44,220	48,454	46,457	44,164
Data Collected & Analysis, Areal Appraisals & Special Studies	37,863	41,832	39,770	37,929
Water Use (Coop)	3,275	3,411	3,476	3,182
Coal Hydrology (Coop)	3,082	3,211	3,211	3,053
Energy Hydrology	15,341	19,431	14,974	14,845
Coal Hydrology	7,474	9,736	6,586	6,949
Nuclear Energy Hydrology	6,594	6,869	7,030	6,595
Oil Shale Hydrology	1,273	2,826	1,358	1,301
Conservation of Lands and Minerals	122,285	133,321	129,806	128,502
Outer Continental Shelf Lands	65,159	68,573	68,873	66,684
Regulatory Programs	32,886	32,334	32,422	31,409
Resource Evaluation Program	32,273	36,239	36,451	35,275
Federal and Indian Lands	41,603	45,578	39,663	39,924
Oil and Gas Program	22,547	25,078	23,078	23,594
Coal Program**	12,702	13,481	8,981	9,579
Other Energy Minerals Program	3,644	4,048	4,300	3,798
Non-Energy Minerals Program	2,134	2,371	2,574	2,273
Water power Program	576	600	730	680
Royalty Management	15,523	19,170	21,270	21,894
Earth Sciences Applications	14,175	21,052	11,204	11,550
Earth Resources Observation Systems	11,904	12,400	9,280	9,490
Environmental Affairs	1,438	4,051	1,314	1,425
Land Resources Data Applications	833	4,601	610	635

Activity/Subactivity/Program Element	FY 1982 Approp.	FY 1983 Request to Depart.	FY 1983 Request To OMB	FY 1983 Request To Congress
General Administration	3,309	3,917	4,171	18,834[e]
Executive Direction	2,427	3,035	3,035	6,200
Administration Operations	--	--	--	11,287
Employee Compensation	882	882	1,136	1,347
Facilities	10,074	11,925	15,925	13,407
National Center - SLUC	8,467	8,467	12,467	11,784
National Center - Facilities Mgmt	1,607	3,458	3,458	1,623
TOTAL, SIR	494,545	555,526[b]	523,384[c]	507,577[d]
National Petroleum Reserve in Alaska				
Barrow Area Gas Operation, Exploration and Development	2,196	6,960	6,400	--
Operation and Maintenance	2,196	6,960	6,400	--
Barrow Area Gas Operation, Exploration and Development	--	--	--	6,400
Digital Cartography	--	9,534	6,059	3,873
TOTAL, USGS	496,741	572,020	535,843	517,850

[a] Digital Cartography which was included in National Mapping, Geography and Surveys in the FY 1983 request to OMB has been pulled out for comparability purposes.

[b] FY 1982 level (President's March Budget) at time of FY 1983 request to Department (May 1981):
SIR $529,527
Digital 6,034

[c] FY 1982 level (Conference action) at time of FY 1983 request to OMB (September 1981):
SIR $515,151
Digital ($4,034)

[d] FY 1982 level (Appropriated) at time of FY 1983 request to Congress:
SIR $494,545
Digital ($3,873)

[e] Reflects revised presentation of General Administration line item which was previously funded largely through direct assessment on programs.

3/31/82

Mr. **Dicks**. The key I guess from Mr. Linowes is to get the look-back audits in place. How many of those are we expecting to do this year?

Mr. **Pendley**. I don't know the exact figures. This is a question before our Inspector General. He is going to do a total of 25 audits. How many he can initiate in this first year, I do not know.

Mr. **Dicks**. When you submit to us the utilization of the $16 million, give us the program for this year and next year.

Mr. **Pendley**. Of course.

Mr. **Dicks**. You are talking about 25 major companies?

Mr. **Pendley**. That is correct, Mr. Chairman.

Mr. **Dicks**. Give us your timetable on that, what your thinking is at this point. We understand it will be subject to some change or correction. It just seems to me that time is of the essence.

Second, I would like to have in the record the best information you have about—maybe this should be done via letter to the committee—that is, I am concerned about the statute of limitations problem we discussed when the Secretary was here.

Mr. **Pendley**. Yes, sir.

Mr. **Dicks**. We certainly do not want to be in a situation where the statute of limitations prevents us from going back and collecting the money that is owed to the Treasury.

Mr. **Pendley**. The IG has notified all 25 companies already that he is to be looking into the record. So I think they are on notice with regard to the running of the statute.

Mr. **Dicks**. I will recess the hearing at this point, until the 20th of April.

MONDAY, MAY 10, 1982.

ADVISORY COUNCIL ON HISTORIC PRESERVATION

WITNESSES

ALEXANDER ALDRICH, CHAIRMAN

ROBERT R. GARVEY, JR., EXECUTIVE DIRECTOR

HON. GERALD B. H. SOLOMON, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEW YORK

OPENING REMARKS

Mr. YATES. Mr. Reporter, show the hearing as coming to order.

This is the hearing for fiscal year 1983 on the budget of the Advisory Council on Historic Preservation. Appearing in support of that budget is its Chairman, Mr. Alexander Aldrich, accompanied by the Executive Director for the Council, Mr. Robert R. Garvey, Jr.

We are pleased today to have Mr. Solomon before our Committee to introduce Mr. Aldrich. Mr. Solomon is the Representative for the Congressional District in which Mr. Aldrich lives.

You may proceed, Mr. Solomon.

INTRODUCTION OF CHAIRMAN

Mr. SOLOMON. Thank you very much Mr. Chairman and it does give me a great deal of pleasure to introduce one of my most accomplished constituents. I will be brief.

Alexander Aldrich is the Chairman of the National Advisory Council on Historic Preservation and he was prepared for this position by extensive education and professional experience.

Mr. Aldrich attended St. Paul School in Concord, New Hampshire, the Massachusetts Institute of Technology and Harvard University where he obtained a degree in American History, and also received his law degree from Harvard Law School and later attended the New York University Graduate School of Law. He even found time to take some classes at the Sorbonne in Paris.

His professional experience is equally impressive. We don't have time to go into every position and appointment he has held. But let me give you an idea. He is a practicing attorney in Saratoga Springs in my district. He was a delegate from the United States to the Second United Nations Conference on the Prevention of Crime and Treatment of Offenders. He was the Director of the New York State Division for Youth.

Sam also served as the Director of the New York State Hudson River Valley Commission where he handled numerous environmental, historical and developmental studies.

Mr. YATES. Who is Sam?

Mr. SOLOMON. Sam Aldrich. Sam is short for Alexander. As Director he worked on many problems affecting the Hudson River from New York City to the Adirondacks. He was President of Long

Island Universtiy, he was Commissioner of Parks and Recreation in New York State. Most recently he was a member of President-Elect Reagan's transition team on Historic Preservation.

Mr. Chairman, Sam is a member of one of the oldest and most distinguished families in America. His grandfather was Nelson Aldrich, a Senator from Rhode Island and Majority Leader of the U.S. Senate. Of course, his first cousin was Vice President Nelson Aldrich Rockefeller.

Let me add that there is no chance of the Aldrich line dying off any time in the near future because he is married to the former Phyllis Williamson Watts and they have nine beautiful children.

I could go on much longer listing the credentials.

Mr. YATES. How many girls and how many boys?

Mr. ALDRICH. Five boys and four girls.

Mr. SOLOMON. I am sure you would prefer, Mr. Chairman, to hear his testimony. Let me just say as someone who has been interested in historic preservation all my life, I know of no one who has served longer or devotes more of his time to this worthy cause. Let me present to you, Mr. Chairman, an outstanding American, Sam Aldrich.

Mr. YATES. Thank you very much, Mr. Solomon. That is a very comprehensive and eloquent introduction.

Mr. Aldrich, it sounds like you are the successor to the original Alexander who was disappointed when he had no more worlds to conquer. You apparently have conquered many worlds.

Mr. ALDRICH. Congressman, the only world I have never conquered is that I have never successfully run for Congress.

Mr. YATES. Oh. Have you tried?

Mr. ALDRICH. Twice.

Mr. SOLOMON. Not against me, Mr. Chairman.

Mr. ALDRICH. No, not against him. But I once ran for his seat.

Mr. YATES. Is that so? Against whom?

Mr. ALDRICH. In a Republican primary.

Mr. YATES. You remind me of the old story of the unsuccessful candidate who made the concession speech and turned to his friends and said, "I want to thank those who voted for me, my wife wants to thank those who voted against me."

So, perhaps I would think that testimony to that story is eloquently stated by the number of children you have.

Mr. ALDRICH. Thank you, sir.

Mr. YATES. You may proceed, Mr. Aldrich. Your statement is received into the record to be followed by your biography.

[The statement and biography of Alexander Aldrich follows:]

STATEMENT OF ALEXANDER ALDRICH
CHAIRMAN, ADVISORY COUNCIL ON HISTORIC PRESERVATION
BEFORE THE COMMITTEE ON APPROPRIATIONS
SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES
HOUSE OF REPRESENTATIVES
MAY 10, 1982

Mr. Chairman and Members of the Committe, I am Alexander Aldrich, Chairman of the Advisory Council on Historic Preservation, and with me is Robert R. Garvey, Jr., the Council's Executive Director. This is my first appearance before this committee, and I am pleased to be able to thank you for the strong support that you have given us over the years. Having served previously as a member of the Council, I am well aware of your past efforts in shaping and funding the national historic preservation program.

As you know, the principal functions of the Council are twofold: to advise the President and the Congress on preservation matters, and to comment on Federal proposals that threaten properties important in American history, architecture, engineering, archeology, and culture. In the past the Council has fulfilled its advisory role by preparing reports and making recommendations on programs, policies, and legislation affecting historic and cultural properties, and submitting to the President and the Congress an annual report on the status of the national historic preservation program. In this regard, I am pleased to present to you today a copy of our Report to the President and the Congress 1981, published in February.

The Council's fulfills its other principal responsibility by reviewing and commenting on Federal, federally-assisted, and federally licensed undertakings that will affect historic and cultural properties included in or eligible for the National Register of Historic Places.

In a speech a few months after the passage of the National Historic Preservation Act of 1966, then Executive Director of the Council George B. Hartzog referred to the program established by the act as a kind of "creative Federalism." A Council Task Force currently preparing a report on Preservation and Federalism Today, will validate the continuing accuracy of that evolution. The Council has tried through the years to seek resolution to conflicts between preservation and progress in the public interest. We believe that we are engaged in important work, helping to save what is worth saving for continued use and enjoyment through a process of bringing together government at all levels and private sector interests.

It is difficult to predict how many sites and buildings have been saved as a result of Council involvement, but a guess is that in the 15,000 projects we have reviewed since 1967, the number of properties benefitting from the review and consultation process probably exceeds 100,000, many of which are buildings found in historic districts in urban areas. Of course, we have had our share of monumental cases, also, and can proudly point to recommending ways to save and reuse such properties as the U. S. Mint in San Francisco, the Old Post Office in St. Louis, and the Pennsylvania Avenue Post Office here in Washington. Likewise, our advise has promoted the compatible integration of new development with the historic environments of the Old and Historic District in Charleston, the Georgetown Historic District in Washington, and the Vieux Carre in New Orleans.

But there is much work left to do. In a recent statement, the Assistant Secretary of Legislation for the Department of Housing and Urban Development reported that we lose 600,000 to 800,000 units of housing per year through abandonment and demolition, a loss we can hardly afford in a time when new construction is falling significantly behind in meeting our demographic needs. The ethic that guides the preservation movement is being adopted in neighborhoods and communities throughout the land, and our work will reflect and influence this change in the future.

The President's Budget Request for FY 1983 includes $1 million for the Advisory Council on Historic Preservation. This is a decrease of $567,000 from FY 1982. With the funds, we plan to continue efforts begun last year in carrying out the Administration's objectives of reducing Federal presence, simplifying regulatory requirements, encouraging private sector initiatives, and promoting preservation decisionmaking at lower levels of government. On August 25, 1981, the Council unanimously adopted a comprehensive policy statement relating the Administration's policies to each of the Council's responsibilities.

Initiatives begun during FY 1982 in accordance with the Council's comprehensive policy statement of August 25, 1981, will be continued to the extent permitted by the availibility of staff, time, and financial resources. These initiatives include the following.

1. Developing Federal agency historic preservation capacity to reduce the need for the Council review of individual cases under Section 106.

2. Emphasizing programmatic review of Federal agency activities, and programmatic solutions to potential conflicts between preservation and other national goals, thus reducing the number of individual cases submitted to the Council for review under Section 106.

3. Developing a capability for monitoring Federal program performance to ensure that preservation systems are meeting expectations; and

4. Encouraging State and local governments to take a more active role in decisionmaking regarding Federal actions affecting historic preservation.

However, during 1983, we will give priority to reviewing and commenting on projects referred to us by Federal agencies pursuant to Section 106 of the National Historic Preservation Act. The Council has established this priority in order to devote the bulk of its resources to assisting Federal agencies in their compliance with basis statutory requirements.

Again, Mr. Chairman, let me express my gratitude for your support in past years for the work of the Council.

I would be pleased to answer any questions you might have.

BIOGRAPHICAL SKETCH

ALEXANDER ALDRICH

Mr. Aldrich became Chairman of the Advisory Council on Historic Preservation on June 26, 1982, for a four year term. He is a member of the Saratoga Springs law firm Helm, Shapiro, Ayers, Anito, and Aldrich, and has recently served as the city attorney of Saratoga Springs. He is currently counsel to the Saratoga Performing Arts Center. As former commissioner of New York State Parks and Recreation, Mr. Aldrich served as State Historic Preservation Officer for the State of New York. He was instrumental in the creation of the popular Canal Parks program along the Barge Canal System.

Prior to his appointment as commissioner, he served as president of the Brooklyn Center of Long Island University, the first executive director of the Hudson River Valley Commission of New York State, executive assistant to Governor Nelson Rockefeller, chairman of a Special Cabinet Committee for Civil Rights, and the first director of the Division for Youth in the Executive Department of the State of New York. In public service since 1956, Mr. Aldrich served as secretary of the New York City Police Department, and later became deputy police commissioner in charge of the Youth Program. Currently he serves as trustee for numerous organizations, including the Preservation League of New York State, the New York Zoological Society and the American University in Cairo, Egypt. From 1976-1978, Mr. Aldrich served as a member of the Advisory Council on Historic Preservation.

Mr. YATES. Thank you, Mr. Solomon.

Mr. SOLOMON. Thank you.

Mr. ALDRICH. Thank you, Gerry, very much. Congressman Solomon is a very good friend of mine and I am one of his strongest supporters.

With your permission, Congressman, I would like to summarize my statement.

SUMMARY STATEMENT

Mr. YATES. Yes, your statement is in the record. I would hope that you would summarize rather than read the statement.

Mr. ALDRICH. Right.

Our role, as I see it, divides fairly neatly into two major areas. First, is our advisory role to submit reports and comments to the President and to Congress. The other is a more statutory role to review and comment on Federally assisted or Federally licensed undertakings which involve national registered properties or a property that is eligible for the National Register.

Our proposed budget is an even round $1 million.

BUDGET CUT

Mr. YATES. How do you feel about the cut of $567,000?

Mr. ALDRICH. How do I feel about it?

Mr. YATES. Well, you know——

Mr. ALDRICH. Congressman, I feel rotten about it to be honest with you.

Mr. YATES. All right. That is what I want to know, because you are the one that I have to go to to find out what will happen as a result of a one-third cut.

OMB CIRCULAR A-10 RESTRICTIONS

Mr. ALDRICH. Congressman, as you know, I am constrained by the terms of OMB Circular A-10 from making any comments about the President's budgetary decisions.

Mr. YATES. All right. Let me read to you from the letter by Congressman John Dingell on that OMB circular. I think it points out certain things that ought to be pointed out. I do not know whether it places you in a middle position, but I am sure you have been there before. These may go into the record.

[Information follows:]

NINETY-SEVENTH CONGRESS

JOHN D. DINGELL, MICH., CHAIRMAN

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FRANK M. POTTER, JR.
CHIEF COUNSEL AND STAFF DIRECTOR

U.S. House of Representatives
Committee on Energy and Commerce
Room 2125, Rayburn House Office Building
Washington, D.C. 20515

May 5, 1982

The Honorable James B. Edwards
Secretary
Department of Energy
Washington, D.C. 20585

Dear Mr. Secretary:

On March 29th, you received a memorandum from Messrs. Meese, Baker and Stockman, regarding "Congressional Inquiries About Spending Increases." That memorandum transmitted a change in OMB Circular A-10, stating that "witnesses will refrain from providing plans for the use of appropriations that exceed the President's request."

As you will see from our April 28th letter (enclosed), we believe that Mr. Stockman has violated "not only propriety and long-standing precedent, but quite probably the law."

I am writing to inform you that the Committee on Energy and Commerce does not recognize any authority on Mr. Stockman's part to impose any limitations whatsoever on the information or testimony you or your representatives may be requested to provide by this Committee or its Subcommittees. I will continue to expect you to observe long-standing precedent and existing law by providing the Congress with the information it needs to discharge its constitutional responsibilities. I think it only fair to advise you at this time of our great and growing concern over the secrecy this Administration is seeking to impose on government operations and our determination to maintain our American traditions of open government.

Sincerely,

JOHN D. DINGELL
CHAIRMAN

U.S. House of Representatives
Committee on Energy and Commerce
Room 2125, Rayburn House Office Building
Washington, D.C. 20515

April 28, 1982

The Honorable David A. Stockman
Director
Office of Management and Budget
Old Executive Office Building
Washington, D.C. 20500

Dear Mr. Stockman:

In recent months we have become increasingly concerned over this Administration's calculated efforts to impose new and disturbing secrecy requirments over a broad range of government operations.

Now, in your March 29th revision of the OMB Circular A-10, of which we recently obtained a copy, we believe that you have violated not only propriety and long-standing precedent, but quite probably the law.

Your revision would impose a totally unacceptable gag rule on all Executive Branch witnesses appearing before committees of Congress by requiring that:

> In responding to specific questions on program and appropriation requests, witnesses will refrain from providing plans for the use of appropriations that exceed the President's request.

This is a radical departure from the language and the intent of the version of OMB Circular A-10 promulgated in the Ford Administration which instructs witnesses to:

> ...make clear the extent to which testimony reflects personal opinion, and that such opinion does not constitute a Presidential request for increased or decreased funds.

The President clearly has the right, as President Ford's order asserted, to make clear what is the program that he recommends to Congress and what he believes should not be in the program Congress acts on. The President, however, is limited to proposing; the Congress disposes, and no President has the authority to limit the information Congress shall have at its command in making its final disposition.

We gather that you rely upon an imaginative interpretation of section 15 of the Budget and Accounting Act of 1921 to support your change. Section 15 provides that:

> No estimate or request for an appropriation and no request for an increase in an item of any such estimate or request, and no recommendation as to how the revenue needs of the Government should be met, shall be submitted to Congress or any committee thereof by any officer or employee of any department or establishment, unless at the request of either House of Congress.

The intent of section 15 is perfectly clear. It is to provide the Administration with some protection from renegades within its own ranks who, for purposes of their own, might volunteer an "estimate or request for an appropriation" or a tax recommendation that is inconsistent with the President's program. Even in this case, the section would permit such testimony, if requested by either House.

There is no conceivable way section 15 can be construed as authorizing the Administration to order officials to refuse to respond to questions posed by any committee of the House or to refuse to provide information requested by any such committee.

In fact, as far as we have been able to determine, whenever the Congress has addressed the question with regard to any specific issue, it has reaffirmed the right of its committees to demand and receive whatever information they deem necessary to carry out their responsibilities. In section 20 of the Budget and Accounting Act, for example, the right is explicitly reaffirmed with regard to revenue and appropriations.

> The Office of Management and Budget shall, at the request of any committee of either House of Congress having jurisdiction over revenue or appropriations, furnish the committee with such aid and information as it may request.

Your unprecedented and presumptuous order represents an unacceptable invasion of Congressional prerogative and we will not countenance its invocation before our Committee.

This Committee has never shied away from its responsibility to issue subpoenas and take such other action as may be necessary to obtain the information needed to discharge our constitutional duties. We have recently had occasion to resolve a not dissimilar issue involving the invocation of so-called executive privilege by the Administration and we are equally determined to resolve this issue in timely fashion. We do not seek a confrontation, but neither do we seek to avoid a confrontation should one become necessary.

Sincerely,

JOHN D. DINGELL
Chairman
Committee on Energy and Commerce

Richard Ottinger
RICHARD L. OTTINGER
Chairman
Subcommittee on Energy Conservation and Power
Committee on Energy and Commerce

U.S. DEPARTMENT OF ENERGY

memorandum

DATE

REPLY TO ATTN OF: MA-821

APR 1 1982

SUBJECT: Responsibilities for Disclosure of Budget Information

TO:
Under Secretary
Assistant Secretaries
Administrators
General Counsel
Chairman, Federal Energy Regulatory Commission

A memorandum from David Stockman amending OMB Circular A-10 is attached for your information and guidance.

This memorandum, dated March 29, 1982, amends paragraph 4.d of Circular A-10 to prohibit witnessess from providing plans for the use of appropriations in excess of the President's request.

In carrying out these instructions, the Department will interpret this prohibition to encompass both written and oral responses to questions raised by Members of Congress or their staffs in hearings, meetings, correspondence or by telephone. It will also include inserts and answers to Member and staff questions to be provided for the record subsequent to a Congressional hearing, all Congressional requests for capability statements, and all other Congressional requests, formal and informal, for information on the use to which appropriations in excess of the President's request would be put.

An exception to this prohibition is responses to questions dealing with what the Department requested from OMB or what was requested in the Department's internal review budget. These questions may be answered even though the data provided could be interpreted as a plan to increase the President's Budget. Where appropriate these answers should include a statement of support for the President's Budget.

The Assistant Secretary for Management and Administration should notify the cognizant appropriations subcommittees of these instructions, and the Assistant Secretary for Congressional, Intergovernmental, and Public Affairs should take steps to inform the proper authorization subcommittees.

Addressees should ensure that all program offices under their control which deal with Congressional testimony and requests for information including detached elements such as Field Offices, Laboratories, Energy Technology Centers and Power Administrations, are apprised of this policy.

W. Kenneth Davis
Deputy Secretary

Attachment

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

March 29, 1982

CIRCULAR NO. A-10
Revised
Transmittal Memorandum No. 1

TO THE HEADS OF EXECUTIVE DEPARTMENTS AND ESTABLISHMENTS

SUBJECT: Responsibilities for disclosure with respect to the budget

This transmittal memorandum amends paragraph 4.d of OMB Circular No. A-10, Revised, dated November 12, 1976. Paragraph 4.d is changed to read:

> 4.d. In responding to specific questions on program and appropriation requests, witnesses will refrain from providing plans for the use of appropriations that exceed the President's request. Witnesses, typically, bear responsibility for the conduct of one or a few programs, whereas the President must weigh carefully all of the needs of the Federal Government, and compare them against each other and against the revenues available to meet such needs. Where appropriate, witnesses should call attention to this difference in scope of responsibility in explaining why it is not proper for them to support efforts to raise appropriations above the amounts requested by the President.

This change is effective immediately.

David A. Stockman

David A. Stockman
Director

THE WHITE HOUSE
WASHINGTON

March 29, 1982

MEMORANDUM FOR HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES

FROM: THE BUDGET REVIEW BOARD
Edwin Meese III
James A. Baker
David A. Stockman

SUBJECT: Congressional Inquiries About Spending Increases

In many instances, representatives of your agency have been or will be asked by Committees of the Congress how the agency might spend funds provided at levels in excess of the President's budget request. In the past, agencies have dealt with such requests in an *ad hoc* fashion. Because responses to such requests run the risk of having the President's budget misinterpreted, such responses should not be provided.

The purpose of this memorandum is to inform you that the Office of Management and Budget has revised OMB Circular A-10, which controls Executive Branch communications with the Congress about the budget, to ensure that all Executive Branch personnel who communicate with the Congress about the budget are informed of the Administration's policy in this area.

Neither this memorandum nor the revision to OMB Circular A-10 is intended to prohibit Executive Branch personnel from communicating with the Congress about the likely effect of *decreases* below the President's budget request.

EXECUTIVE OFFICE OF THE PRESIDENT
OFFICE OF MANAGEMENT AND BUDGET
WASHINGTON, D.C. 20503

November 12, 1976

CIRCULAR NO. A-10
Revised

TO THE HEADS OF EXECUTIVE DEPARTMENTS AND ESTABLISHMENTS

SUBJECT: Responsibilities for disclosure with respect to the budget

1. Purpose. This Circular supersedes Bureau of the Budget Circular No. A-10 dated January 18, 1964. It provides guidance on responsibilities for disclosure of information with respect to the preparation of the President's budget.

2. Background and applicability of Circular. The Budget and Accounting Act of 1921 (31 U.S.C. 11) requires that the President transmit an annual budget to Congress and prohibits agency submissions in any other manner unless at the request of either House of Congress (31 U.S.C. 15). The Act was passed following unsatisfactory experiences with the previous practice of budget submissions to the Congress that were not approved and controlled by the President. The budget is required by statute to provide certain specific information, is to be prepared by the Office of Management and Budget (OMB), and is to be prepared in such form as the President determines. The budget is also required to reflect the President's judgment in establishing proposed appropriations and expenditures. Agencies are required to submit to OMB such information as may be required to permit OMB to evaluate, revise, reduce, or increase agency requests for appropriations and to prepare the budget. The President is also required to transmit various summaries, additional reports, and any proposed supplemental or deficiency appropriations. Historically, the Executive Branch communications that have led to the preparation of the budget have not been disclosed by the agencies or by those who have prepared the budget.

This Circular is applicable to those budget documents transmitted annually by the President to Congress and to the communications concerning the formulation of the budget and related documents, as well as to budget amendments, supplemental estimates, and other proposals for the granting of new obligational authority that are transmitted after the transmission of the original budget.

This Circular does not apply to the budget requests of the Legislative and Judicial Branches of Government, or, except for paragraph 4, to those requests that are specifically exempt by statute from prior review and approval by the President. Nothing in this Circular is intended to prohibit the disclosure of records that are specifically required to be disclosed by statute. For example, this Circular does not prohibit the release of records otherwise required to be released under the procedures of the Public Information Provisions of the Administrative Procedures Act (5 U.S.C. 552), known as the Freedom of Information Act (FOIA). At the same time, this Circular does not require the disclosure of information required or permitted by law to be withheld. For example, it is not intended to require the release of information pursuant to the Freedom of Information Act that an agency is authorized to withhold.

3. Requirements for confidentiality prior to official transmittal. The confidential nature of agency submissions, requests, recommendations, supporting materials and similar communications should be maintained, since these documents are an integral part of the decisionmaking process by which the President resolves budget issues and develops recommendations to the Congress. Presidential budget decisions are not final until the budget itself is transmitted to Congress. Amendments to the budget and supplemental appropriation requests may also follow the transmittal of the budget. Budgetary material should not be disclosed in any form prior to transmittal by the President of the material to which it pertains. The head of each agency is responsible for preventing premature disclosures of this budgetary information.

4. Agency testimony before and communications with Congress on budgetary matters. In furnishing information on appropriations and budgetary matters, representatives of agencies should be aware of the limitations on such communications, including the limitation that:

> "No estimate or request for an appropriation and no request for an increase in an item of any such estimate or request ... shall be submitted to Congress or any committee thereof by any officer or employee of any department or establishment, unless

at the request of either House of Congress." (31 U.S.C. 15)

Furthermore, agency representatives should be aware of restrictions upon communications to influence legislation that are not conducted through proper official channels (18 U.S.C. 1913).

Following formal transmittal of the budget, an amendment, or a supplemental appropriation request, agency representatives will be guided by the following policies pertaining to budgetary matters when testifying before any Congressional committee or communicating with Members of Congress.

a. Witnesses will give frank and complete answers to all questions.

b. Witnesses will avoid volunteering personal opinions that reflect positions inconsistent with the program or appropriation requests the President has transmitted to the Congress.

c. If statutory provisions exist for the direct submission of agency budget estimates to the Congress, witnesses will be prepared to explain both the agency submission and the request in the President's budget.

d. In responding to specific questions on program and appropriation requests, witnesses will make clear the extent to which testimony reflects personal opinion, and that such opinion does not constitute a Presidential request for increased or decreased funds. Witnesses, typically, bear responsibility for the conduct of one or a few programs, whereas the President must weigh carefully all of the needs of the Federal Government, compare them against each other and against the revenues available to meet such needs. Where appropriate, witnesses should call attention to this difference in scope of responsibility.

e. Where there is a request for a written submission that will involve a statement of opinion relating to program and appropriation requests, witnesses will arrange for a reply to be provided through the head of the agency.

f. Agency representatives should be careful that their communications are not perceived to be an "estimate or request for an appropriation ... or an increase in an item of any such estimate or request..." (31 U.S.C. 14, 15). Agency representatives are expected to support the

President's budgetary decisions and seek adjustments to those decisions through established procedures for budget amendments or supplemental appropriation requests if the agency head determines such action to be necessary.

5. Clearance of changes in the President's budget. The prohibition against submissions by agencies to Congress of estimates or requests for appropriations without the approval of the President or request of either House of Congress applies to changes in appropriation language and to changes in the limitations recommended in the budget. When an agency desires to propose such changes, written requests will be presented to the Office of Management and Budget (in accordance with the provisions of OMB Circular No. A-11).

When it is possible to reduce the amount of a request for appropriations before action has been taken by the Appropriations Committee of either House, the head of the agency will promptly inform the Office of Management and Budget. If significant changes are planned in the amount requested or the conditions pertaining to a program of the agency without changing proposed appropriation language contained in the budget on which Congress has been requested to act, the agency will inform the Office of Management and Budget. The Office of Management and Budget will inform the agency as to whether or not a formal transmittal of the change will be made. This procedure applies to appropriation requests, as well as to other estimates, e.g., business-type statements required by the Government Corporation Control Act.

6. Reductions made in appropriation bills. The final authority for appropriations rests with the Congress. Its action is based on extended hearings and recommendations by the Appropriations Committees and is taken only after consideration by each body as a whole. Any decision by an agency head to request restoration of a reduction should be carefully considered, taking into account the reasons for the reduction, the circumstances under which it was made, its significance from the standpoint of the President's program, and other relevant factors.

7. Information available to the public. An agency may disclose budgetary records of that agency, if otherwise appropriate, upon a request for such records pursuant to the FOIA following the end of the fiscal year to which such information pertains. Although it is not possible to determine merely by the generic category of records whether an agency would be authorized to withhold records requested

under the FOIA in every instance, most budgetary documents of an agency that are subject to the FOIA should be exempt from mandatory release pursuant to the provisions of 5 U.S.C. 552(b)(5), and an agency should not release such records prior to the expiration of the fiscal year to which such records pertain. Depending upon the nature of the record requested other exemptions to the FOIA may apply, or the release of records within 5 U.S.C. 552(b)(5) may be inappropriate even after the end of the fiscal year to which the records pertain. Agency heads will be held responsible for determining the propriety of releases of records under the FOIA pertaining to budgetary matters.

Certain agencies headed by a collegial body may be required to hold their meetings open to public observation unless the agency properly determines that the matter to be discussed warrants the closing of those meetings for reasons enumerated in the Government in the Sunshine Act (Public Law 94-409). Some meetings covered by that Act may pertain to budgetary information discussed in this Circular. Although, as with the FOIA, it is not possible to determine merely by the generic category of such information whether such an agency would be authorized to close a particular meeting covered by the Government in the Sunshine Act, the premature disclosure of budgetary information may "be likely to significantly frustrate implementation of proposed agency action" (5 U.S.C. 552b(c)(9)(B) added by section 3(a) of Public Law 94-409). Futhermore, other exemptions from the open meeting requirements of the Act may apply. Such agencies will be held responsible for the propriety of determinations that would lead to the disclosure of this budgetary information.

8. Inquiries. All questions or inquiries should be submitted to the Office of Management and Budget, Budget Review Division, Resources Systems Branch, telephone (202) 395-3172.

James T. Lynn
Director

Mr. **Aldrich**. With nine children, Congressman, I am there all the time.

Mr. **Yates**. I know. I know. Well, that is good.

Section 20 of the Budget and Accounting Act for examples says this:

> The Office of Management and Budget shall, at the request of any Committee of either House of Congress having jurisdiction over appropriations, furnish the Committee with such aid and information as it may request.

That is part of the law. Mr. Stockman's statement is only a statement issued by Mr. Stockman, and I would suggest that it doesn't have the same importance or relevance as this Budget Act has. And I take it from this that when an Appropriations Committee, asks for information from you that it is acting in accordance with the provision of the law which I think overrules the Stockman provision.

Now, as I said, this kind of places you in between the Committee and Mr. Stockman, the rock and the hard place. And I do not know which is which.

I say all this merely to point out that this Committee refuses to accept the imprimatur, or would be imprimatur, proposed imprimatur, that Mr. Stockman is giving to you.

Now, you have a relationship with Mr. Stockman, but I suggest that it is an illegal relationship so far as Mr. Stockman's effort to try to persuade you not to give the Congressional Committee any information that it requests.

Mr. **Aldrich**. I would agree to an effort to share with you any information I can.

Mr. **Yates**. That is fine. I am sure you were going to and I was merely putting into the record the background which I thought may help you buttress any attacks or any kind of criticism that Mr. Stockman might want to levy at you for having dared to express an opinion.

Mr. **Aldrich**. You asked my opinion whether I was happy.

Mr. **Yates**. Did I use that phrase?

Mr. **Aldrich**. I think you said how do you feel about that.

EFFECT OF ONE-THIRD BUDGET CUT

Mr. **Yates**. Yes, that is right. It wasn't really emotion as much as it was what will this do? What will a one-third cut do in terms of your responsibilities and in connection with the work of the Advisory Council? That, of course, is information that this Committee needs. That is the reason I asked the question.

Mr. **Aldrich**. First of all, as we see it, it will diminish the size of our staff from 40 people down to 25.

Mr. **Yates**. Perhaps you were overstaffed, though.

Mr. **Aldrich**. Well, Congressman, I am never satisfied with the way I do my job or Bob does his job.

Mr. **Yates**. That is understandable.

Mr. **Aldrich**. We always think we can do a better job. But I have a feeling, I haven't been in this position for more than a year, I was appointed in June last year, and I have a feeling that we were already a lean and hungry organization speaking in terms of staff.

Mr. **Yates**. Were you?

Mr. **Aldrich**. I really feel that way.

Mr. **Yates**. Can you tell me why you feel that way?

Mr. **Aldrich**. Because we have been developing, and I am telling you this from the perspective of having been a State Historic Preservation Officer in New York from 1971 and, also having worked as a member of the Council from 1976 to 1978. We have been working with the various Federal agencies who have historic preservation responsibilities for 17 years now.

As time goes on, we have gradually become more and more effective in getting them to do their work. This is generally speaking, they are doing a better job. And I would like to think that ultimately, consistent with the President's approach, that we can reduce the Federal presence, our Federal presence, when other Federal agencies do their job properly.

However, I think that as time goes on, more and more Federal agencies appear that have historic responsibilities. Last week we were over in the Senate side at a budget hearing, and the Holocaust Commission was having its hearing. This was a new group that is going to have a very significant role in historic preservation. And we will have to work with them to develop their response to the Historic Preservation Act of 1966.

So, I think we will continue to have an initiating role in our project review and our liaison with other agencies. I do not think that in the immediate future we will be zeroing out our programmatic review of the budget. What I do want to do, however, is shift from the individual project reviews, a site-specific project review, to more programmatic memoranda of agreement where, instead of looking at every site along the big pipeline in the Northern Tier, we will develop an agreement where they will develop a system of operation that includes historic preservation. And we won't have to look at every single project.

OMB ALLOWANCE

Mr. **Yates**. Well, apparently OMB does not consider your Agency to have the importance that I would think that you and Mr. Garvey ascribe to it. You thought that your work required you to ask for some $1.9 million of OMB which would have been a $400,000 increase over last year. OMB, however, struck out the $900,000 and gave you the $1 million, presumably because of—and we all recognize it, it is a fact—stringencies that have to be placed on the Federal budget.

But, where those stringencies should occur of course is the matter of judgment. The question is of relative importance of the programs that make up the Federal Government's budget. How important is historic preservation? How important is the Advisory Council on Historic Preservation. And that of course is where you come in. How important do you think this activity is?

Mr. **Aldrich**. I do not think it should surprise anyone that I think it is much more important than anybody else does.

Mr. **Yates**. Why is that? I am surprised. Tell me why I shouldn't be surprised.

Mr. **Aldrich**. I am up to my neck in it, I work in it very assiduously and this has been my professional commitment since about

1966. And it wouldn't surprise me to come to the conclusion that I feel more strongly about it than anybody else does. And I think I have somewhat of an advocate's role in this area.

Mr. YATES. Good.

Mr. ALDRICH. I have tried to exercise that with the Office of Management and Budget.

Mr. YATES. I would be glad to hear your arguments.

Mr. ALDRICH. I think historic preservation can be a very effective tool in bringing cities into a more effective economic relationship with the rest of the country. I have seen this work in my own hometown, Saratoga Springs, which is a very small city.

Mr. YATES. Is this where the race track is?

Mr. ALDRICH. Yes, sir. I think one time last year when Bob was visiting me that you called him and suggested that he have a good time at the race track. And I want the record to show that we didn't go to the race track.

Mr. YATES. And placed no bets?

Mr. ALDRICH. As a resident of Saratoga Springs, I never place bets. I let the people from outside do that.

Mr. YATES. It is a nice place. I drove through it once on my way up to the Finger Lakes. I remember it being a lovely place.

Mr. ALDRICH. We would love to have you come back. Historic presentation in places like the Vieux Carre of New Orleans, in Chicago, I know you and Bob have been working on matters related to the Pier and the Loop, but preservation can shape an environment using historic values. And particularly involving tourist magnets, such as the Faneuil Hall area of Boston where you can use a historic preservation as a magnet to tourists. You can greatly enhance the economic value of what you have in an area. We have done this in Saratoga. You are doing it in Chicago, it is being done in Boston, New Orleans and so on.

This is probably the principal reason why I think historic preservation is perhaps not really an environmental matter, it is an economic matter. I look upon it as an opportunity for the inner city to use in developing its economic resources, to develop its housing.

A lot of people think preservation is an environmental matter, and it is used to slow down projects. I look at it just the opposite. I look at it as an opportunity to do imaginative development. That is why I think it is so important, in today's economy and as a creature of the Reagan Administration.

MOROSCO THEATER

Mr. YATES. Now, one of your famous controversies recently was the Morosco Theatre.

Mr. ALDRICH. Yes, sir.

Mr. YATES. Tell us what happened there, in New York City.

Mr. ALDRICH. Yes. I remember the interest of this Committee in that episode. What happened was their largest urban development action grant in the history of the program was being made available by the City of New York to assist in the demolition of a portion of the Times Square area, which, if you have been there recently, you would know is a terribly blighted part of the city.

There are a lot of porno theatres. It is a mess.

Mr. **Yates**. Yes, the wrong things bloom there.

Mr. **Aldrich**. The developer, Portman, from Atlanta, was going in there to erect a major new hotel, theatre, a center. Regrettably, both the Morosco Theatre and the Helen Hayes Theatre were on the site. And a great deal of time and energy went into the question whether Portman could incorporate those two theatres, both of which were eligible for the National Register, into the design for his new hotel complex.

About 5 years ago the matter first came to the attention of the Advisory Council. But only with respect to the Helen Hayes Theatre. At that time, Mr. Garvey and the other people on the Council urged the developer to submit the Morosco Theatre in addition to the Helen Hayes Theatre. They were reluctant to do that.

In December of this last year, 1981, the question came up with respect to the Morosco Theatre. It came up because a group of litigants went to Federal court and demanded that that theatre be included in the consideration of historic preservation impacts.

As part of the settlement of that court case, the Morosco Theatre was submitted to the Department of the Interior for its judgment as to whether it qualified to be on the National Register. It took them a couple of weeks to review this and determine that indeed it was.

The minute that happened that triggered the review of the Advisory Council because it involved a UDAG grant which was a federally assisted project. The Federal court in the Southern District of New York had recognized the urgency of the case. They said that they wanted an answer to this as soon as possible. This happened to coincide with the weekend when the Continuing Resolution question came up as to the future funding of Federal agencies.

We were actually, along with practically everybody else in Government, closed down for a day, I think over that weekend, whatever the weekend was.

Mr. **Yates**. Probably Good Friday.

Mr. **Aldrich**. No, it was January, wasn't it? I can't remember exactly when it was.

Mr. **Garvey**. December 21st.

Mr. **Aldrich**. At any rate, we reviewed this. I took the position which was the same position Dick Jenrette, my predecessor, took on the Helen Hayes Theatre, that this was a matter that did not have to go to the full Council, that we could sign off and say that, even though it was a historic property meeting the standards of the Interior Department for listing on the National Register, that the overall public necessity, the public interest was best served by not saving the theatre and allowing the Portman hotel project to proceed. This by the way, was exactly the same decision that had been made by the New York City Landmarks Commission, by the City of New York, by the State Historic Preservation Officer in New York, which I used to be. And we made that decision in a 5-day span of time.

In that time, the litigants, Actors Equity, revived their action before the same Federal Court and alleged that the White House in the person of Mr. Nofziger had improperly exercised political influence to get a decision in favor of the developer.

In fact, Mr. Nofziger had called Mr. Garvey and me in a conference call, far from urging us to take a particular position, simply urged us to arrive at a quick decision, which is what the Federal court itself had already said. That was it. That was the entire extent of his involvement.

I spent a couple of days on the stand up in New York simply giving testimony to that effect. And the Federal court in New York stated that this is all that happened, and that was the end of it.

Mr. YATES. Did the Secretary of the Interior play any role in the decisionmaking process?

Mr. ALDRICH. With respect to placing the Morosco Theatre on the National Register that was of course his responsibility. He had a representative who sat in on the conference which took place when the staff was making its recommendation to me. But, I am the person who makes the final decision. In that respect the Secretary of the Interior had no role whatever. There was no communication from him or anyone on his staff to me as to what my decision should be.

Mr. YATES. Well, you have got a revised Council in place now.

Mr. ALDRICH. Yes, sir.

RELATIONSHIP WITH DEPARTMENT OF THE INTERIOR

Mr. YATES. How do you work with the Department of Interior? Do you advise them of what you do, or what is your relationship?

Mr. ALDRICH. Yes. Well, we have a number of people with whom we communicate very frequently. The person that I am probably closest to is Under Secretary Hodel. I had a meeting with him as recently as a week ago. The principal person to whom the staff function is delegated at the moment is the Assistant Secretary for Fish, Wildlife and Parks whose assistant is Ric Davidge; he has attended some meetings.

But, we have very good communications developed over the last 15 years with a great many different people in the Department. Jerry Rogers, the National Park Service, the Surface Mining—I don't have the right titles.

Mr. YATES. Office of Surface Mining.

Mr. ALDRICH. Yes, we have good direct communications on a staff level with all of these different groups.

REDUCED WORKLOAD

Mr. YATES. All right. You wanted another $900,000 for your work. OMB struck out $900,000 leaving you with $1 million. What work will you not be able to do that you wanted to do for your $900,000?

Mr. ALDRICH. First of all, we will be able to do far fewer site-specific projects than we are doing now. Our purpose hopefully is to provide sufficient project reviews for the Federal establishment so that we can keep the Federal establishment out of the Federal courts as much as possible.

I look at the Morosco Theatre case for example as something we would like to avoid in the future. Federal litigation is extremely expensive to the Federal Government. It is far more expensive than the Advisory Council doing its project review work effectively.

So, there is going to be an inevitable cutting down of our project review capacity, and I hope, I am not completely certain, but I hope we will be able to do enough so that we will stay out of Federal court, or the Federal agencies will stay out of Federal court. We certainly will have to cut back on reports that we make, studies we have made in the past. I think our principal role is in the projects review area, and that is where we will have to concentrate.

Mr. YATES. I think you ought to embellish that answer for the record by giving us a more comprehensive itemization of what you hope to do with the $900,000. I will accept the answer that you have given, but I think we ought to know more fully what was represented by the $900,000.

[The information follows:]

The $1,920,000 budget request to OMB was based on the amount recommended by the House and Senate Reports on the 1982 appropriation ($1,632,000), plus $288,000 for the following programs:

1. Develop Federal agency preservation programs.
2. Emphasize programmatic review over individual case review.
3. Evaluate Federal, State and local preservation programs.
4. Develop a training capability to reach hundreds of community officials.

These initiatives were eliminated. In addition the base program was cut back to $1,000,000.

	1983 budget summary
1982 base	$1,632,000
New programs	+288,000
1983 budget estimate	1,920,000
Cuts:	
(a) New programs	−288,000
(b) 4 percent of 1982 appropriations (across the board)	−65,000
(c) General cut 1983 President's budget	−567,000
	1,000,000

Our justification addresses the general cuts made from the 1982 Appropriation of $567,000 to the 1983 allowance. We must cut 15 full-time equivalent positions, and we may have to find new ways to conduct our business. Reductions will be made in the following program areas:

1. Council Direction and Administration, −6 FTE, −$292,000:

The only staff attorney in the General Counsel's office will be eliminated. This will impair the provision of adequate legal services to the Council and the staff. The Word Processing Unit (4 FTE) and our single messenger will be eliminated which will curtail our office support services.

General Administration or, common program costs will be reduced by over 50 percent. We will be compelled to cut travel, relinquish about half our present space, and generally scale down all other expenses.

2. Cultural Resource Preservation, −8 FTE, −$256,000:

This office will lose 8 professional positions at the GS-9/GS-11 journeyman level resulting in a re-ordering of workload priorities. We will be unable to do Counterpart Regulations or Programmatic Memoranda of Agreement. We hope to do adequate individual case work to help agencies fulfull their statutory requirements under the National Historic Preservation Act.

3. Policy and Program Development, −1 FTE, −$19,000:

OPPD will lose one professional employee and cut staff reports, information sheets and other small publications by one half. Responses to information requests will be cut by two-thirds. Participating in the OPM training course on historic preservation will be limited to 2 sessions vice 8.

USE OF HISTORIC BUILDINGS

Mr. **Yates**. Has GSA responded to Section 110 of the Historic Preservation Act to use historical buildings whenever possible?

Mr. **Aldrich**. I believe they have. Bob, help me out.

Mr. **Garvey**. We are unaware of any particular action that GSA has taken with regard to Section 110.

Mr. **Yates**. Shouldn't you know about it, Bob?

Mr. **Garvey**. I think we might if it had happened. But we know of none.

Mr. **Yates**. Who has the responsibility of pointing out Section 110 of the Historic Preservation Act to GSA? Do you have to do that?

Mr. **Garvey**. The Secretary of Interior has the responsibility for issuing guidelines for Federal agency responsibilities under Section 110. I might say, Mr. Chairman, that there are provisions in the Act for, not transfers, but lease and use of properties by the National Park Service. And we have begun discussions with the Department on that particular activity. That had its genesis in New York particularly, in connection with the buildings that were so important to the immigration pattern.

Mr. **Aldrich**. Ellis Island.

Mr. **Garvey**. At Ellis Island.

TAX STUDY

Mr. **Yates**. What is the status of the tax study that was required by the legislation of 1980?

Mr. **Garvey**. As we informed you, Mr. Chairman, we didn't have funds in our 1982 budget to do the study. But we did find money near the end of last fiscal year to contract with the National Trust for that study.

It is a three-phase effort. Phase one has been completed. With the money that we were able to provide and a good deal of pro bono help, that is well along. We are pleased with the first phase which has identified the issues and raised all the questions.

Now, we are moving into the second part of it, and it is our anticipation that we will be finished in this fiscal year.

Mr. **Yates**. Can copies of your study be made available for the committee?

Mr. **Garvey**. Oh, yes, indeed.

Mr. **Yates**. We would appreciate receiving them.

Mr. **Garvey**. As a matter of fact, we would be glad to share with you the phase one document.

Mr. **Yates**. Yes. That will be fine.

Mr. **Garvey**. Keeping in mind of course that it has not been transmitted to the full Council for their adoption, nor will it be until it is finished as a package. But we will share that as it goes along with you.

Mr. **Yates**. We will understand that it is informational rather than official.

Mr. **Garvey**. Correct. That is the point I wish to make.

[The information follows:]

SYNOPSIS OF TAX STUDY

Phase I of the tax study is on exhaustive, 39 page report describing the scope and methodology of the study with a list of contacts to be interviewed. It contains a detailed questionnaire which will be used to conduct the interviews. The questionnaire includes a wide range of tax, real estate, preservation, and policy issues which have surfaced since enactment of historic preservation tax incentives in the Tax Reform Act of 1976.

A slective literature survey was conducted from 1954 to the present to help identify real estate, tax and policy issues. The purpose of the literature survey to identify lawyers, accountants, and economists previously unknown to the Trust, to identify seminal articles which may have influenced the shaping of tax policy, and to obtain contemporary insights into the economic, legal and acccounting considerations which accompanied major reforms and amendments of the Internal Revenue Code.

SURVEY OF FEDERAL TAX LAWS AFFECTING HISTORIC PRESERVATION: PHASE I REPORT

Submitted to the Advisory Council on Historic Preservation
by the National Trust for Historic Preservation
in the United States

March 1, 1982

SURVEY OF FEDERAL TAX LAWS AFFECTING HISTORIC PRESERVATION: PHASE I REPORT

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SURVEY OF FEDERAL TAX LAWS AFFECTING HISTORIC PRESERVATION: PHASE I REPORT

SCOPE OF STUDY

Section 503 of the National Historic Preservation Act (Pub. L. 96-515) (the "Act") requires the Advisory Council on Historic Preservation, in cooperation with the Secretary of the Interior and the Secretary of the Treasury, to submit a report to the President and the Congress on federal tax laws relating to historic preservation or affecting in any manner historic preservation. The Report is required to include recommendations respecting amendments to such laws which would further the purposes of the Act.

The Advisory Council retained the National Trust for Historic Preservation as its consultant to conduct the study and prepare the Report. General guidance and advice in the conduct of the study and preparation of the Report is provided by an Advisory Council Task Force.

The Report is to be prepared in three phases. Phase I of the study is the issue identification phase. A report on this phase of the study is to be submitted to the Advisory Council on March 1, 1982. The Advisory Council Task Force is to report back to the National Trust by March 15, 1982, with its approval of the issues to be studied during the second phase of the study. Phase II of the study will consist of in depth research and refinement of the issues approved for study. A report on refinement of issues will be submitted to the Council no later than June 30, 1982. The Council will review the second phase report and comment within fifteen days after receipt. Phase III, consisting of preparation of the final report, will be completed in two steps. A draft report will be submitted to the Advisory Council by August 15, 1982. The Council will then have until September 15, 1982, for review and comment. The final report, incorporating any agreed changes, will be submitted to the Advisory Council by November 1, 1982.

This report constitutes the Phase I Report.

METHODOLOGY

Since October 1981 Trust attorneys have been interviewing real estate, tax, and preservation professionals to gather information about the way federal tax laws affect historic preservation.

Contacts

The list of individuals to be interviewed was compiled following discussions with Trust regional offices, Trust Advisors, members of the Trust's Advisory Committee on Tax Policy, selected State Historic Preservation Officers and representatives of the Department of the Interior. A copy of the list of individuals to be contacted is attached to this report as Exhibit A.

Approximately forty individuals, including law professors, attorneys, appraisers, and accountants, were identified for interviews, either in person or by telephone. We have interviewed twenty-five individuals to date. We have also interviewed several individuals not presently included in Exhibit A. Approximately two hundred additional individuals, including representatives of national professional associations and representatives of national, state and local preservation organizations were invited to submit written comments. To date we have received eighteen written responses.

All individuals and organizations identified on Exhibit A received an introductory letter from the Trust's president, Michael Ainslie, soliciting their assistance. An introductory overview was enclosed with the letter outlining the study and identifying some of the issues preliminarily identified as possibly meriting further research. A copy of the Overview is attached to this report as Exhibit B.

Questionnaire

A detailed preliminary questionnaire was developed to assist in conducting interviews. The questionnaire includes a wide range of tax, real estate, preservation, and policy issues which have come to our attention in the years since enactment of historic preservation tax incentives in the Tax Reform Act of 1976. A copy of the questionnaire is attached to this report as Exhibit C.

The purpose of the questionnaire and the broad survey of tax professionals was several-fold. Initially, the questionnaire and interviewing process enabled Trust attorneys to meet with a wide variety of tax and real estate practitioners, policy makers, and educators to obtain a broadly-based briefing on the legal, tax and policy underpinnings of present tax law. The interviewing process also assisted us in distinguishing between those issues which are serious and merit further study and those which can be disposed of relatively quickly. Finally, the interviewing process enabled us to identify possible consultants and others who might be of further assistance in later phases of the tax study.

Literature Survey

A selective literature survey was conducted from 1954 to the present to help identify real estate, tax and policy issues. The purpose of the literature survey was three-fold: to identify lawyers, accountants, and economists previously unknown to us, to identify seminal articles which may have influenced the shaping of tax policy, and to obtain contemporary insights into the economic, legal and accounting considerations which accompanied major reforms and amendments of the Internal Revenue Code.

STRUCTURE OF THE STUDY

Subject to changes in emphasis which might result from our research over the next few months, including discovery of new issues and discarding of issues found to be unimportant, this report on the identification of issues is intended to serve as a rough outline of the final Report.

The federal government, by Acts of Congress, Executive orders and administrative decisions, has made historic preservation a national policy. It has chosen to carry out that policy, in part, through federal tax incentives intended to encourage historic preservation. Therefore, a major focus of the study will be to identify under what circumstances use of the federal tax code to encourage historic preservation may be appropriate and desirable.

For purposes of analysis, it is first necessary to consider the social, political and economic environments in which preservation decision-making occurs. The focused issues of how existing federal tax laws affect historic preservation and ways these laws might be improved to further the cause of historic preservation must be considered in the context of the broader environmental issues affecting historic preservation. Thus, many of the issues identified for research are similar to those considered whenever government intervention to influence private decision-making is contemplated.

We begin by defining what is meant by the terms "historic properties" and "historic preservation" and consider the role historic preservation plays in our society. The four major ways in which historic preservation is carried out -- government ownership and stewardship, government resource identification and protection, government financial and non-financial assistance, and private ownership -- are considered, as well as some of the social and political issues affecting historic preservation.

After considering the major institutional and social influences affecting historic preservation, we move to a consideration of how private decisions affecting historic resources are made. The ways economic needs may dictate preservation results are considered, as well as their relationship to the major social and political issues affecting historic preservation.

This background will help us to focus on when and under what circumstances use of federal tax incentives for historic preservation are appropriate. In analysing federal tax laws affecting historic preservation we will focus on the neutrality of tax treatment accorded preservation activities, whether and to what degree additional assistance in the form of tax relief is needed, and on an evaluation of the investment tax credits for qualified rehabilitations contained in the Economic Recovery Tax Act of 1981.

ISSUE IDENTIFICATION

The issues which follow have been identified as meriting further research. Not all of the identified issues will receive equal weight in the final report. Further, we feel we must reserve the right to substitute and refine issues as necessary throughout the study period based on the progress and development of our research.

I. What Is Meant By The Term "Historic Property"

The threshold issue, what constitutes historic property, is answered in very broad terms by the Congressional findings, declarations of policy, program statement and definitions contained in the Act. The Act uses the terms "historic property" and "historic resource" interchangeably. Section 301(5) of the Act states that the terms "historic property" or "historic resource" mean,

> any prehistoric or historic district, site, building, structure or object included in, or eligible for inclusion on the National Register; such term includes artifacts, records and remains which are related to such a district, site, building, structure or object.

The National Register of Historic Places is maintained by the Secretary of the Interior, pursuant to authority contained in Section 101(a)(1)(A) of the Act, as the official inventory of our nation's historic and cultural resources deemed worthy of preservation.

The National Register is comprised of "districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture." Interim and proposed rules governing National Register eligibility criteria and administrative guidelines were published in the Federal Register on November 16, 1981.

For purposes of further research and preparation of the Report, whenever the terms "historic property" or "historic resource" must be defined we contemplate relying on the definitions contained in the Act and the eligibility criteria for National Register listing.

II. What Is Meant By The Term "Historic Preservation"

The Act uses the terms "historic preservation" and "preservation" interchangeably. Section 301(8) of the Act states that the terms "preservation" or "historic preservation" include

> identification, evaluation, recordation, documentation, curation, acquisition, protection, management, rehabilitation, restoration, stabilization, maintenance and reconstruction, or any combination of the foregoing activities.

The historic preservation program embodied in Title II of the Act includes traditional concerns for preservation of historic buildings, sites and monuments for museum, educational and inspirational purposes. It also evidences a broader concern for historic neighborhoods and districts through promotion of urban cultural parks and urban conservation districts. The Act also encourages the preservation of historic ships, waterfronts and other maritime interests, as well as archaeology and the preservation of prehistoric sites.

In addition to property-specific programs, the Act contemplates establishment of programs to train skilled labor in trades and crafts relating to historic preservation, to assist individuals and small businesses living and working within historic districts to resist the pressures of displacement and gentrification, and to assist Indian tribes and non-profit organizations representing ethnic or minority groups to preserve their cultural heritage and remain in their historic neighborhoods through the creative use of historic preservation, community planning and economic development skills.

There are four principal, and often interrelated, ways in which historic preservation is carried out. The role of each is identified below.

A. Public Ownership In Historic Preservation

National, state, and local governments own a variety of historically significant monuments, sites, museums, and other properties. Many significant historic properties in public ownership are acquired and used to provide educational, aesthetic, inspirational and cultural guidance to the American people.

In addition, governments own significant historic properties for functional, utilitarian uses, including office and meeting space. Historic properties may be acquired to reinforce historic preservation programs by ensuring that significant buildings are preserved and reused. They may also be acquired by happenstance, as often occurs when significant, but unidentified, properties are acquired for office or other use.

B. Government Resource Identification And Controls In Historic Preservation

In this section existing national, state and local governmental resource identification and controls over the use and modification of historic properties will be considered.

C. Government Financial Assistance In Historic Preservation

In this section, the role of government financial assistance at the national, state and local levels, including provision of both direct financial assistance and tax incentives, will be considered.

D. Private Ownership And Stewardship In Historic Preservation

The vast majority of the properties individually listed in the National Register or located within registered historic districts are in private ownership. This section of the study will focus on the role of private ownership and stewardship of historic properties.

III. Social And Political Issues

Sections 1 and 2 of the Act outline in considerable detail the political and social purposes underlying the federal historic preservation program. This section of the study will focus on the role of historic preservation in daily life and some of the related social and political issues.

A. Gentrification And Displacement

Historic preservation has been identified in the minds of many with "gentrification" and the displacement of minorities and other long-term residents of urban neighborhoods. Historic districting is perceived as a threat by some minority leaders and community leaders in urban neighborhoods. At the same time historic preservation has contributed to neighborhood rehabilitation and revitalization and increased community pride.

B. Real And Perceived Inequities: Problems Of The "Great Estate"

Many significant landmark properties remain in private ownership. Few question that the continued preservation of such properties for the cultural and educational enrichment of the public should be encouraged. However, public ownership of such properties, whether by units of government or by charitable organizations, may be undesirable or impractical. In these instances, the burdens of preservation typically fall on private owners of historic properties.

There is a tension between the social goal of promoting the preservation of significant historic properties in private ownership and the social goal of discouraging undue concentrations of wealth. The issue has arisen in the tax field in both the charitable giving and the estate and gift areas, most notably in the reforms of the charitable giving area in the Tax Reform Act of 1969, in the 1976 and 1980 amendments respecting charitable gifts of partial interests for conservation purposes, and in the alternate valuation procedures for family farms and closely held businesses.

In seeking solutions to this issue, we hope to undertake a search for international precedents from England and the European Common Market countries whose economic, social and tax systems most closely resemble our own in addition to looking at American political, preservation and tax theory.

C. Tension Between The Needs Of Historic Preservation And Economic Development

There is a perceived tension between economic growth and development, particularly in older urban areas, and the preservation and reuse of historic resources. This phase of the study will focus on this tension. In researching this issue we hope to identify and evaluate selected historic districts within which significant economic development and growth has occurred and not occurred.

IV. Economic Issues

Economic issues permeate our society and influence decision-making at all levels. In this phase of the study we will attempt to identify and isolate economic elements which affect the decision to preserve, maintain, use or destroy historic resources.

A. Identification Of Types Of Historic Properties By Ownership

The ownership entity, and the tax and financial needs of the ownership entity, are often as important as a historic property's location in determining whether the property is preserved or destroyed. The decision to preserve or destroy a property may be controlled by whether the property is owned by a taxable or tax exempt entity, by whether the property is held for investment purposes or for personal residential or recreational use, or for use by a charitable or eleemosynary institution.

This section of the study will address the different types of ownership entities and will attempt to isolate the economic and tax factors which influence their decision-making.

An example frequently brought to our attention is the asset-rich taxpayer with a relatively low earned income. Because of percentage of income limitations on charitable giving it may be impossible for the owner of historically significant appreciated property to optimize the tax benefits from a charitable contribution.

Another example frequently cited is the "substantially rehabilitated" test contained in IRC § 48(g). This test relies on the adjusted basis of the property in the hands of the taxpayer on the date the rehabilitation begins to measure the amount of rehabilitation work necessary to qualify for the credit. Using adjusted basis as the measuring stick to qualify for the credit places undue emphasis on the transactional history of the property and ownership structuring.

In each of these examples, an existing, targeted tax incentive has been alleged to be ineffective, in some instances, in influencing private decision-making.

B. Is Federal Intervention Needed To Influence Private Decision-making Affecting Historic Property

We recognize the need to develop an approach to deal with the questions of whether and to what extent federal intervention is necessary to influence preservation and economic decision-making by private individuals, corporations, and taxexempt entities.

Assuming federal intervention is necessary, we will have to weigh what form such intervention should take. The variety of possible forms of federal intervention, including provision of federal financial assistance directly, and through the tax system, will be considered.

C. Effect Of Federal Intervention

Once we have identified whether, and to what extent, federal intervention is necessary to influence private decision-making, we will need to consider the effect such federal intervention will have on the preservation, political, and social issues identified above.

D. Sensitivity Of Historic Preservation To Financing, Inflation And Other Economic Trends

We hope to identify a methodology to measure the economic sensitivity of historic properties and historic preservation activities by ownership entity, property use, and location.

1. Sensitivity Of Commercial Historic Preservation Rehabilitations To General Economic Conditions

Numerous individuals have expressed concern that one segment of historic preservation activities, rehabilitation of historic buildings for commercial and residential rental uses, is directly and adversely affected by the combined effects of inflation, high interest rates and a shortage of financing. Determination of whether this segment of historic preservation activities is relatively more or less sensitive than the market for general real estate investment and development activities is an important issue which merits additional research in the study.

2. Sensitivity Of Other Historic Preservation Activities To General Economic Conditions

Several individuals have expressed the opinion that historic preservation generally is highly sensitive to economic recessions, inflation, high unemployment and high interest rates. This is premised on the related assumptions that a significant percentage of historic properties are located in historic districts, which have high levels of unemployment and large concentrations of underskilled workers. Because the areas where historic properties are located may be more sensitive to general economic decline and less sensitive to economic expansion than non-urban areas, historic preservation may also be more sensitive to economic decline and less sensitive to economic growth.

V. TAX ISSUES

We propose to consider both specifically targeted tax incentives for historic preservation and other provisions of the tax laws which have an effect on historic preservation. We will focus on the types of historic resources that are affected, the types of taxpayers that are affected and the degree to which the property, resource, or activity is tax-sensitive. Appropriate consideration will be given to the purposes, policy and program outlined in the Act and to the environment of social, political, and economic issues identified in the first part of this report

A. Tax Policy Issues

We do not propose to engage in a detailed examination of whether the tax system should be used to achieve social and economic ends. Rather, we accept as a given that Congress has determined to encourage historic preservation and, within the basic framework of encouraging historic preservation, it has further determined to use the tax code to deliver federal assistance where appropriate.

B. Evaluation Of The Tax System's Effect On Historic Preservation

We propose to evaluate the existing tax law in terms of its neutrality to historic preservation as a first step in evaluating the impact the Internal Revenue Code has on historic properties and historic preservation. Both positive and negative effects of existing tax law on historic preservation will be identified.

We intend to focus on the type of property, the ownership entity, the economic needs of the property, and the economic needs of the property owner, to identify ways the tax system affects historic preservation. In addition to considering the ways the administration and application of existing tax law affect the economic decision to retain, maintain, rehabilitate or destroy historic resources, we will evaluate possible alternative treatments and make recommendations for change where appropriate.

C. General Tax Issues Meriting Further Research

A number of "issues" were raised in the questionnaire attached as Exhibit C. We do not regard the issues raised in the questionnaire as controlling in the study. Through our interviews and research some issues have emerged and will emerge as important while others will not. Some of the tax issues which appear at this stage to be important enough to merit further research are listed below.

1. Under what circumstances is the tax treatment accorded historic resources different than that accorded other real estate?

2. What effect will ERTA's reductions in the individual, corporate and estate and gift tax rates and related reforms, such as tax-free interspousal transfers and corporate leasing, have on historic properties?

3. Has extension of accelerated cost recovery to existing properties eliminated the bias between the tax treatment of new construction and existing buildings?

4. What effect does taxation of historic properties at their highest and best use for development for estate and gift tax purposes have on historic preservation?

5. Are economic incentives needed to encourage owners to maintain historic property in good repair?

6. A variety of individuals, corporations and tax-exempt entities are relatively tax-insensitive because they do not pay taxes or because their tax burden is relatively minimal. Would it be feasible and desirable to develop a system of tax disincentives to discourage otherwise tax insensitive organizations and taxpayers from destroying historic properties?

7. What effect does § 170(e)(1), which limits the value of a charitable contribution deduction when property is held by a real estate developer or other individual tainted with "dealer" status, have on historic preservation?

9. What effect does the tax law have on the preservation of historic ships and other maritime interests?

10. What effect does the tax law have on archaeology? We understand from archaeologists that the inability to assign a value to archaeological remains in the ground has adversely affected their efforts to preserve archaeological resources.

11. What is the effect of the tax treatment accorded owner-occupants of historic properties on historic preservation?

12. What effect do the tax laws have on displacement and gentrification within historic districts?

13. Does the tax law inhibit program-related historic preservation development activities by charitable organizations?

D. Evaluation Of Investment Tax Credits For Qualified Rehabilitation Expenditures

Evaluation of the existing system of tax incentives for historic preservation will occupy a major portion of our research activity in the coming months. We feel that it is critical to examine the effectiveness of the investment tax credit in encouraging the rehabilitation of certified historic structures for depreciable commercial and residential uses.

The tax credit for qualified rehabilitations of historic structures neglects a significant percentage of the historic resources whose preservation is encouraged under the Act. For example, all non-depreciable property, including owner-occupied residences, is excluded. Among depreciable historic resources, the following property interests are excluded:

Ships,

Buildings which fail to meet the "substantially rehabilitated test", and

Buildings which fail to retain "75% or more of the existing external walls" as external walls in the rehabilitation process.

Nevertheless, the investment tax credit for certified rehabilitations of historic structures appears to be a very powerful incentive to encourage quality rehabilitations of historic commercial buildings, particularly in our nation's older urban and industrial areas.

In our discussions and research several issues regarding the tax credits have emerged. These may be categorized under two headings: legal and technical issues affecting the new tax credit system and anticipated difficulties in evaluating the new system.

1. Legal And Technical Issues

a. Adequacy Of Marginal Incentive To Encourage National Register Listing And Certified Rehabilitation Of Historic Structures

Do the additional 5% credit and the exemption from the requirement to reduce basis by the amount of the credit provide sufficient incentive to induce an investor or owner to go through the expense and time delays involved in having a building which is not located within a registered district listed on the National Register of Historic Places and obtaining certification of the rehabilitation?

There does not appear to be a comparable difficulty with properties located within registered historic districts because the statute creates a presumption that all buildings within historic districts must comply with the certified rehabilitation requirements unless the taxpayer obtains a certification from the Secretary of the Interior that the building is not of historic significance to the district. However, the existence of the presumption may deflect rehabilitation investments to non-historic districts where investors and developers are not required to go through the decertification procedure to use the 15 and 20% tax credits.

b. "Substantially Rehabilitated" Test

In order to qualify for the investment tax credit a building must be substantially rehabilitated. A building meets the "substantially rehabilitated" test only if the qualified rehabilitation expenditures paid "during the 24-month period ending on the last day of the taxable year exceed the greater of (I) the adjusted basis of such property, or (II) $5,000." This test has been criticized on two grounds: the "cliff" effect of the test and problems in computing the 24- or 60-month periods within which rehabilitation expenditures may be qualified.

The requirement that the qualified rehabilitation expenditures exceed the greater of $5,000 or the adjusted basis of the building may thwart the purpose of promoting quality rehabilitations of historic properties. The test relies on the transactional history of the building rather than whether a rehabilitation has been conducted in conformity with the Secretary of the Interior's Standards for Rehabilitation. Low-basis properties and properties which have been owned by a taxpayer or his predecessors for a long period of time are disproportionately favored. Recent purchasers of historic properties may be discouraged from undertaking certified rehabilitation because of an inability to meet the "substantially rehabilitated" requirement.

The measuring period in which rehabilitation expenditures may be incurred to qualify for the test is equally significant. The 24-month period (or 60-month period in the case of a phased rehabilitation) is measured not from the date rehabilitation work is commenced but rather "on the last day of the taxable year" in which the building is placed in service. This effectively reduces the period during which qualified rehabilitation expenditures can be incurred. In addition, the subtlety of using the last day of the taxable year to measure the 24-month period creates a trap for the unwary and undermines certainty of tax treatment for many investors.

c. 75% of External Walls Requirement

The requirement to retain at least 75% of the existing external walls in place as external walls in the rehabilitation process has created problems for investors and owners of historic structures which are unable to meet the 75% of existing external walls test.

d. Timing of Investment Tax Credit

Because of the absence of Treasury Regulations, confusion exists about when the investment tax credit may be taken. Also, if a rehabilitation initiated within a 24-month period (or a 60-month period for a phased rehabilitation) is not fully completed within the expiration of the 24- or 60-month period, several persons questioned whether the basis attributable to the rehabilitation work completed during the 24- or 60-month period would qualify for the tax credit, assuming the building otherwise met the "substantially rehabilitated" test.

2. Anticipated Difficulties In Evaluating Tax Credit For Qualified Rehabilitations

A variety of technical difficulties are anticipated in measuring the effectiveness of the investment tax credit for qualified rehabilitations of historic structures, including the following:

a. Time Period For Analysis

The investment tax credit is only available for rehabilitation expenditures incurred after December 31, 1981. The Report must be completed by November 1, 1982, only 11 months after the tax credit went into effect.

b. Absence Of Regulations

The statutory provisions governing the investment tax credit for rehabilitations of historic structures are relatively clear. Thus, many taxpayers should be able to use the law without awaiting Treasury Regulations. However, in those areas where there are questions of interpretation, some taxpayers may be unwilling to proceed in the absence of clarification from Treasury.

c. Possible Distortions Created By General Economy

So far 1982 has been a relatively bad year for real estate development activities because of the combined effects of high interest rates and inflation. We are uncertain what effect general economic conditions will have on our effort to evaluate the effectiveness of the tax credit.

VI. Charitable Gifts of Partial Interests For Conservation Purposes

Section 6 of the Tax Treatment Extension Act of 1980 (Pub. L. 96-541) clarified, revised, and codified tax rules relating to charitable gifts of qualified conservation contributions as defined in new IRC § 170(h). Many of the individuals surveyed expressed concern that the specificity of conservation purposes contained in § 170(h)(4) may undermine the ability of preservation organizations to acquire donations of easements or remainder interests to preserve historic properties. Some of these concerns are directly attributable to the absence of implementing regulations and a lack of familiarity with the operating rules of this new provision. Additional issues include the following:

A. Uncoupling Income Tax Charitable Contribution Deduction From Estate and Gift Tax Charitable Contribution Deductions

If a charitable gift of an easement or remainder interest in a property (other than a personal residence or farm) fails to qualify as being for conservation purposes, the taxpayer will be subject to gift tax liability. We have been advised that this has discouraged charitable gifts of easements and remainder interests by many taxpayers. Several persons have suggested that uncoupling the income tax deduction from the estate and gift tax deductions might be a desirable solution.

B. Requirement For Gift To Be Granted In Perpetuity

Numerous individuals have criticized the requirement that the donation must be made in perpetuity to qualify for the charitable contribution deduction. This has been a particularly difficult issue for owners of long-term leaseholds. Typically, a lessee under a long-term lease has the right to replace existing improvements and bears the full economic burden of increased operating costs and lost revenues if it continues to maintain existing historic buildings on the land. The ability to donate a preservation easement for a term equal to the lease term has been suggested as a possible resolution of this problem.

C. Valuation Standards

In its testimony on H.R. 7318 (96th Cong., 2d Sess.) the Treasury Department expressed concern about the problems of valuing gifts of easements and other partial interests on historic and non-historic properties. Presently, easements are valued under the "before and after" procedure identified in Revenue Rulings 73-339 and 76-376. Several individuals questioned whether the Internal Revenue Service would be in a position to promulgate procedures and guidelines for appraising easements over historic properties.

VII. Additional Issues Meriting Research Beyond The Scope Of This Study

There are a variety of additional, related issues which are beyond the scope of this study but which could be profitably researched.

A. What Is Meant By The Term "Historic Preservation"

The threshold issue, "what is meant by the terms 'historic property' and 'historic preservation'" were resolved, for purposes of this study, by strict reference to the Act's definition of terms. Additional research into the meaning of these terms could form the basis of an independent research project.

In addition to researching American preservation, political and social precedents and thought, we believe it would be useful to undertake a comparative analysis of historic preservation and resource identification techniques used by foreign countries, including Europe, Russia, China and the Orient, and developing Third-World Countries.

B. Economic Factors Influencing Units Of Government To Retain, Preserve, Rehabilitate Or Abandon Historic Buildings For Utilitarian Purposes

For purposes of this study we have decided not to research the economic factors which influence government decision-making to retain, maintain, rehabilitate, abandon or destroy historic buildings or other historic resources. As sovereign entities, units of government are less directly affected by federal tax laws than private entities. We believe this could be a very important area for further research. However, within the constraints of available time and resources during the study period, we have confined our research efforts to the the decision-making of private individuals and entities, including tax-exempt organizations.

EXHIBIT A

TAX STUDY CONTACTS

Personal Contacts

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EXHIBIT B

Overview of National Trust Study on Federal Tax Laws Relating to or Affecting Historic Preservation

Introduction

The National Trust for Historic Preservation is a private, charitable, educational and nonprofit corporation chartered by Congress in 1949 to further the policies of the Historic Sites Act of 1935 and to facilitate public participation in the preservation of sites, buildings and objects significant in American history and culture. The Advisory Council on Historic Preservation is an independent agency of the United States Government. The Council was established by the National Historic Preservation Act of 1966 (Pub. L. 89-665, 16 U.S.C. 470) to advise the President and the Congress on matters pertaining to preservation.

Scope of Study

Section 503 of the National Historic Preservation Act Amendments of 1980 (Pub.L. 96-515, 16 U.S.C. 470) directs the Advisory Council on Historic Preservation, in cooperation with the Secretary of the Interior and the Secretary of the Treasury, to prepare a report on federal tax laws affecting historic preservation. The act, as amplified by the accompanying committee reports, directs the study to consider both present tax laws specifically directed at historic preservation and other provisions of the tax laws that have an impact on historic preservation. The report is required to contain specific recommendations for amendments to the tax laws which would further the purposes of the National Historic Preservation Act.

Primary responsibility for preparation of the report and legislative recommendations will rest with attorneys in the National Trust's General Counsel's Office and Office of Policy and Planning. General policy direction will be provided by an Advisory Council Task Force consisting of representatives of the Secretary of the Treasury, Secretary of the Interior and a Presidential appointee. Upon completion and adoption of the report in November 1982 the Advisory Council will submit it to the President and the Congress.

As a national preservation organization, the National Trust is in a unique position to observe the way our nation's tax laws influence public and private decisions affecting historic preservation. Because the Trust is a private membership organization, we are particularly sensitive to the influence federal tax laws have on the decisions of private individuals, organizations and others undertaking preservation by private means. The issues discussed below are representative of some of the issues we have encountered. They are an illustrative, but by no means exhaustive, discussion of the types of issues we believe the report should address.

Issues

Removal of the favorable depreciation treatment formerly accorded first users has gone a long way toward neutralizing the Internal Revenue Code's former bias favoring new construction. Other changes in the Economic Recovery Tax Act of 1981 (ERTA), especially the system of graduated investment tax credits for qualified rehabilitated buildings, enhance the relative attractiveness of rehabilitating older buildings. The phased increase in the unified credit against estate and gift taxes should lessen the pressure to sell large estates for development.

Other changes in tax policy have more subtly affected the relationship between new construction and preservation and adaptive reuse of existing buildings. Among these are section 189, relating to construction period interest and taxes, and section 195, relating to start-up expenses. By requiring these and related expenditures to be amortized rather than deducted when incurred, the Code may have removed a substantial "up front" incentive for major, tax-induced investment in new construction.

The use of tax exempt bond financing, in combination with a panoply of federal programs like Urban Development Action Grants, section 503 S.B.A. loans and locally controlled tax-exempt community development corporations, at one time appeared capable of providing sources of construction financing for rehabilitation and reuse of historic resources. In the current climate of fiscal austerity, the continued availability of such financing appears doubtful. To what extent can -- and should -- construction and permanent financing for historic rehabilitation projects be encouraged through the Internal Revenue Code?

The distinctions between exempt and non-exempt activities blur as organizations move from traditional museum stewardship to more direct forms of real estate activity. Increasingly, exempt organizations serve as lender or developer of last resort in adapting functionally obsolescent historic buildings for contemporary uses. Should organizations created to further preservation of individual landmark buildings be required to pay taxes on income derived from debt-financed, program related investments? Should exempt organizations be allowed to serve as the sole or principal general partner in syndications of historic preservation investments?

In the estate tax area, the beneficial impact of increasing the unified credit is readily apparent. Other issues remain. Should the alternate valuation provisions for family farms and closely-held businesses be extended to historic resources? Should taxpayers be allowed to contribute historic properties to the United States in partial or total satisfaction of estate taxes?

In the area of charitable giving, should the charitable contribution deduction for income and estate taxes be uncoupled from the gift tax charitable contribution deduction, at least in connection with gifts of partial interests for "conservation purposes" under sections 170(f)(3)(B)(iii) and 170(h)? What impact will the major amendments to these sections have on the ability of preservation and local land conservation trusts to acquire and protect significant properties through less than fee acquisition?

Timing

The study will be accomplished in phases. The first phase, which includes identification of issues and tentative resolutions, is expected to be completed by mid-February, 1982. The results of this information gathering and issue identification process will be submitted to the Advisory Council Task Force on or before March 1, 1982. Based on this report, the Task Force will give approval to the issues to be studied.

The second phase will consist of refinement of the issues approved by the Task Force. This will involve selective consultation with tax, accounting, economic, legal and real estate experts and identification of case examples in which application of specific tax provisions have promoted or undermined preservation objectives. A report on the refinement of issues will be submitted to the Task Force for review and approval in June 1982.

The third phase will consist of preparation of the final report, which will include an introduction, identification of issues, appropriate case studies and economic analyses of the issues and recommendations for legislative changes. The final report will be submitted to the Task Force in final draft form in September. Upon review by the Task Force the draft report will be revised as necessary and submitted to the Council in final form on November 1, 1982.

EXHIBIT C

TAX STUDY QUESTIONNAIRE

Introduction

The Advisory Council on Historic Preservation has requested the National Trust to undertake a study of federal tax laws relating to or in any way affecting historic preservation. The study is mandated by the National Historic Preservation Act Amendments of 1980.

Mortimer Caplin presaged the need for our study and its focus in a 1976 Trust Conference on Public Tax Policy and Conservation of the Built Environment when he said:

> The more difficult tax policy questions are posed by the broadened concerns of preservationists for the built environment, a concern that encompasses neighborhoods, districts, and private buildings that will never benefit from public restoration programs or from private charity. The major burden of this aspect of the preservation movement must be borne by private interests - owners of commercial property, real estate developers, and individual home owners. The willingness of private interests to rehabilitate or maintain an older property rather than allow it to deteriorate or tear it down and build something new, will depend in large measure on economic considerations, including tax considerations.

Historic properties include large commercial and industrial buildings which have become functionally obsolescent, office buildings which fail to utilize permissible bulk and density under zoning regulations, and private residences in urban and rural settings. In addition to great estates and small urban landmark buildings, historic properties also include open lands facing subdivision pressures, ships and other maritime interests and archaeological resources. They may be owned by the very wealthy, by corporations, or by public and private tax exempt entities and units of government. Often, historic properties provide housing for low and moderate income families as well.

As you go through this questionnaire please keep in mind the diversity of historic resources and the types of individuals and entities which own them. Please consider the effects the tax consequences normally associated with the acquisition, rehabilitation, management and disposal of real property might have on historic properties. Please also consider the extent to which each activity is tax-sensitive.

Where possible we would greatly appreciate it if you would identify specific examples of instances in which federal tax treatment has made a concrete difference in the preservation or destruction of a historic building or land area.

For purposes of analysis we have assumed that Federal assistance for historic preservation will continue to be provided, in part, through tax incentives. We are concerned about the tax policy issues posed by using the tax code to provide indirect assistance for historic preservation in lieu of providing adequate funding through direct appropriations. However, for purposes of the study we accept as a given that Congress has made the policy decision to continue to use tax incentives to further historic preservation activities.

One goal of the study is to evaluate the existing tax incentives in terms of their effectiveness in furthering the cause of preserving properties significant in American history and culture. Another is to identify those areas of tax law which may have unanticipated adverse effects on historic preservation. Finally, the study is intended to provide a foundation for the Advisory Council on Historic Preservation to make recommendations to the President and the Congress on how our nation's tax laws can be improved to further the cause of historic preservation.

Your assistance in this effort is greatly appreciated.

GENERAL BACKGROUND

1. Would you please summarize the nature and extent of your tax background.

(a) Have you had any direct experience with the historic preservation tax incentives?

(b) Have you done much work in the areas of real estate taxation, real estate financing, exempt organization work, tax legislation?

2. If you are a representative of a preservation organization or serve on its board of trustees, please give the organization's name, address and telephone number.

(a) Please summarize the nature and extent of your organization's dealings with real estate and the nature and extent of your experience with the Internal Revenue Code.

(b) Does your organization own real estate?

(c) Does it operate a revolving fund?

(d) Have you engaged in real estate syndications?

(e) Have you undertaken any direct development?

3. We believe that the recent tax cuts enacted in ERTA will serve to refocus public attention on each individual's personal tax burden, even though the relative tax burden may have been significantly reduced.

(a) Do you agree?

(b) Do you believe that tax incentives will continue to provide a significant psychological stimulus to tax favored investment activites?

(c) Can you identify any past examples of private taxpayer activity which was stimulated by the tax code

-in the Corporate tax area?

-in the International tax area?

-in the Oil and Gas / Hard Minerals area?

-in the Estate tax area?

-in the Personal income tax area?

(Examples include the Domestic International Sales Corporations, and the old Western Hemisphere Trade Corporation deduction which was repealed in the Tax Reform Act of 1976.)

4. To what extent do you believe the tax code influences private decision making?

(a) Have you seen any studies which provide an objective measure to determine how much incentive is necessary to raise an activity to public awareness?

(b) To what extent is the tax code an efficient mechanism to stimulate such activity?

(c) Do you know of any economic models which have compared the relative efficiency of tax induced activities with direct appropriations?

5. Historically, the Internal Revenue Code has promoted a variety of governmental purposes beyond simple revenue raising. As we grapple with the questions of whether and the extent to which historic preservation should be encouraged through the Internal Revenue Code, do you have any recommendations of the types of issues we should be considering?

(a) How would you approach this problem?

(b) Do you know of any studies which would be of assistance?

(c) Are you aware of any computer models that would be of assistance?

6. Federal historic preservation assistance can be provided through direct grants or through tax incentives. For purposes of this questionnaire, assume that historic preservation will only be assisted through federal tax incentives.

(a) Do you believe the existing federal tax incentives reach the correct people?

(b) Are they cost efficient as presently administered?

(c) Is there any duplication in the delivery of federal tax incentives?

(d) Do the tax incentives result in any distortions of what would otherwise be considered sound preservation and land conservation policies?

(e) Would you favor a certification of "economic need" as a precondition to qualifying for federal tax incentives for historic preservation?

ERTA AND GENERAL POLICY ISSUES

7. Do you believe ERTA's elimination of the first user restriction on the use of accelerated depreciation will be sufficient to offset the economic factors which have traditionally favored new construction over rehabilitation?

8. Following the major tax reductions in ERTA, do you foresee future increases in individual and corporate income taxes?

(a) Do you foresee development of collateral revenue raising measures such as a value added tax, a consumption tax, or increases in federal excise and "sin" taxes?

(b) What impact would a value added tax have on historic preservation?

9. If a value added tax were adopted, how would you structure an effective tax incentive for historic preservation?

10. If a personal consumption tax were adopted, how would you structure an effective tax incentive for historic preservation?

11. In 1981 a couple filing a joint return would reach the 49% tax bracket with an income of $45,800. ERTA significantly changed the maximum tax brackets so that in 1982 a couple would reach the 50% bracket at $85,600, in 1983 at $109,400, and in 1984 and subsequently at $162,400. Would you please describe for us the effects on investment patterns you foresee from reduction of the maximum tax from 70% to 50% and the raising of the maximum tax bracket limits I have just described.

(a) Could you specifically describe the effect you see on real estate investment?

(b) Could you describe the effects you see on other forms of tax sheltered investment?

(c) What effect do you foresee on the ability of charitable organizations to solicit donations for museum and preservation projects?

TAX TREATMENT OF REAL ESTATE INVESTMENTS IN HISTORIC PROPERTIES

12. It has been our impression that elimination of the first user requirement for accelerated depreciation or cost recovery has largely eliminated the Code's bias which, since 1954, favored new construction. Do you agree and why?

13. Can you think of any area in which the Code treats investments in existing buildings differently than investments in new buildings?

(a) Please identify what they are.

(b) Can you think of any policy reasons which would justify a different treatment?

(c) Can you think of any specific examples in which this difference in treatment has resulted in the retention or demolition of an older building?

14. Do you believe the 25% tax credit for qualified rehabilitation expenditures in connection with the rehabilitation of a historic structure is sufficient to induce a private developer to go through the real and perceived expense and delays associated with state and federal certifications of the quality of rehabilitation work?

(a) How would you approach the problem of measuring the sufficiency of the 25% tax credit?

(b) Please identify any other tax incentives under the Code which require certification or approval by another governmental agency to qualify for the incentive?

15. Do you have any suggestions for evaluating the effectiveness of the new 25% investment tax credit?

(a) Do you believe the 5% increase in the credit and the basis adjustment for 15% and 20% rehabilitations provide a sufficient incentive to encourage individuals to engage in the controlled rehabilitation of historic structures subject to certification by the Secretary of the Interior?

16. The Code provides considerable incentives for investors and owners of depreciable historic property. There is, to date, no specific incentive to encourage rehabilitation and maintenance of historic owner-occupied residences.

(a) Would you favor extension of some form of tax incentive to owner-occupants?

(b) If so, how would you structure such an incentive?

(c) If you do not favor such extension please explain why.

(d) What are the policy arguments that might be advanced in support or opposition?

17. The existing system of tax incentives for historic rehabilitations is premised, in part, on the notion that the cost of undertaking a quality rehabilitation of an historic property is frequently more expensive, and the construction process is more risky than either new construction or rehabilitation of a nonhistoric building. Once the building is rehabilitated there is presently no incentive to encourage quality preservation of the rehabilitated building.

(a). Would you favor provision of a targeted incentive to encourage ongoing capital expenditures to maintain rehabilitated historic buildings?

(b). What type of incentive would be appropriate?

- Double or multiple deductions for maintenance expenses?

- Tax credit against maintenance costs?

- Tax credit against costs of capital improvements?

18. We have seen a trend in which private historic property owners attempt to operate individual historic properties as house museums. For a variety of reasons the owners of such properties may be reluctant to seek tax exempt status. Because of the expense associated with the "museum" business and the relatively small levels of income derived from private house museums, such taxpayers frequently encounter difficulties with the "hobby-loss" limitations under Section 183.

(a) Would you favor an exception to Section 183 for operators of historic house museums?

(b) Would your response be different if such museums were operated in conformity with federally prescribed standards or were overseen by the National Park Service or by a state or local historic preservation office?

(c) What would be the policy arguments for and against such treatment?

(d) Would your answer change if the hobby-loss exception were confined to operators of properties that were individually listed in the National Register or were individually designated National Historic Landmarks? (There are some 1600 National Historic Landmarks around the country and approximately 20,000 individually listed National Register properties.)

FINANCING FOR HISTORIC PRESERVATION

19. Financing for all real estate projects is both difficult and expensive to obtain. This is especially true for historic rehabilitations which typically entail properties in older urban areas, involve unforeseeable construction delays and may involve new and untested marketing devices. Examples include the "Quaker" Hilton in Akron, Ohio in which abandoned grain

silos were converted to hotel space and abandoned warehouses and schools which have been converted for office, shopping or residential uses.

(a) Do you believe tax exempt financing for historic preservation projects would help spur the availability and affordability of financing for historic preservation rehabilitation projects?

(b) What form of tax incentive would you favor to provide such financing?

- Retention or expansion of the existing tax exempt bond financing authorities?

- Exempting lender's income from such lending activities from taxation?

- Provision of a tax credit (comparable to the ITC available for investors) for lenders to qualified rehabilitation projects?

20. Do you believe tax incentives should be provided to lessees for entering long-term leases of historic structures prior to rehabilitation?

(a) How would you structure such an incentive?

TAX EXEMPT ORGANIZATIONS AND ACTIVITIES

21. Many historic properties are owned and operated by tax exempt organizations for museum use or for the utilitarian purposes of colleges, universities and churches.

(a) How would you structure a federal tax incentive to encourage otherwise exempt organizations to rehabilitate, preserve and maintain their historic properties?

(b) Do you think it would be reasonable, and administratively feasible, to impose tax disincentives on otherwise tax exempt organizations which destroy historic properties? (In the 1976 Tax Reform Act, Congress enacted a system of incentives and disincentives to encourage the preservation of historic structures and to discourage their demolition.)

(c) What form should such disincentives take?

(d) Do you have an opinion as to the effectiveness of tax disincentives?

22. Charitable organizations are increasingly involved in traditional business activities. Preservation organizations operate revolving funds in which they purchase, rehabilitate, and resell historic properties, often with below market financing. In addition, some organizations are actively engaged, as developer of last resort, in the direct development of historic properties for compatible commercial use. The tax status of such activities may be challenged by the Internal Revenue Service, especially where the organization raises funds for its development activities through limited partnerships in which it serves as a corporate general partner. (See Strawbridge Square, Inc. v. U.S., Ct.Cl. Docket Number 471-797; Plumstead Theatre Society Inc, 74.T.C. 1324 1980.)

(a) Should income generated from debt-financed preservation development activities be treated as unrelated business income?

(b) Should specific statutory authority be provided to classify such activities as exempt, at least where the development activity is restricted to registered historic properties or historic districts, or should such exemption more appropriately occur on a case by case basis as is presently done?

CHARITABLE GIVING AND ESTATE AND GIFT TAX ISSUES

23. Should the charitable contribution deduction for income and estate taxes be uncoupled from the gift tax charitable contribution deduction, at least in connection with gifts of easements and other partial interests for "conservation purposes" under Sections 170(f)(3)(B)(iii) and 170(h)?

(a) What are the policy reasons for or against imposition of a gift tax for transfers of property to publicly supported charities which, for technical reasons, fail to qualify for a charitable contribution deduction?

(b) What administrative difficulties do you foresee in uncoupling the gift tax charitable contribution deduction from the income and estate tax charitable contribution deduction?

24. Section 170(e)(1) denies a charitable contribution deduction for any gain that would not have been long term capital gain if the property contributed had been sold by the taxpayer at its fair market value. Frequently, historic buildings and related land areas are held by real estate developers or other individuals who are tainted with "dealer" status. In making a charitable gift of a historic property such a developer would be confined to his cost or other basis in the property.

(a) What would be the policy effects of exempting historic properties from this limitation?

(b) Are you familiar with any specific examples in which this limitation has forced incompatible development of a historically important building or land area?

25. Some of the most significant historic properties are privately owned by land-rich, cash-poor families. In the past we have heard that the need to raise cash to pay estate taxes has forced the incompatible subdivision, condominium conversion or other detrimental development of historic properties.

(a) Do you believe this to be the case?

(b) Can you think of specific examples where this has occurred?

(c) Do you believe this will continue to be a problem in light of the $600,000 credit against estate and gift taxes which will be in effect in 1987?

26. Section 2032A authorizes an alternate valuation for closely held businesses and family farms which will permit a decrease of up to $750,000 in their value for estate tax purposes.

(a) Do you believe extension of the alternate valuation rule to historic properties would provide an effective incentive to their continued preservation?

(b) Section 2032A has been criticized in the past because of its former $500,000 limitation and because of the requirement that both the decendent and the beneficiary be material participants in the property's operation. Would you please explain the tax policy reasons that underlie such limitations.

(c) If Section 2032A were extended to historic properties would you favor retaining such limitations?

(d) Can you think of any other features of Section 2032A which might make it suitable or unsuitable for use in preserving historic properties?

28. In the Tax Reform Act of 1976 a credit against estate taxes was allowed for an executrix' transfer of real estate within the boundaries of a national forest.

(a) Would you favor allowing an estate tax credit in lieu of a charitable contribution deduction for gifts of historic properties to units of government or qualified charities?

(b) Would your answer to the foregoing question be different if such an estate tax alternative were confined to historic properties in which there was a demonstrated national, state or local governmental interest, i.e. for museum or public park acquisition?

(c) Would you explain the policy and tax administration issues involved in such a reform.

29. We are frequently contacted by representatives of archaeological organizations seeking assistance in the preservation of archaeological sites. Can you think of any tax incentives that might be useful to encourage sound conservation of archaeological resources?

30. We frequently receive inquiries from maritime organizations and individuals interested in maritime preservation seeking information about the availability of tax incentives for rehabilitations of historic ships. The present tax incentives for historic preservation are only available for

buildings. Under proposed Treasury regulations issued to implement the 10% Investment Tax Credit, tax incentives were denied for all vessels, including those which were permanently moored or were rendered non-seaworthy.

(a) Do you believe tax incentives should be extended for rehabilitations of historic ships?

(b) If such incentives were to be extended to ships, would you favor extension to all historic vessels or would you limit it to those which were permanently moored?

SYNTHETIC FUELS CORPORATION

Mr. **Yates**. Now, we have a new Government corporation in effect, the Synthetic Fuels Corporation. Does the Corporation have the same responsibility for historic preservation as any other Federal agencies?

Mr. **Garvey**. I am sorry, I do not know the answer to that question.

Mr. **Yates**. I think that is a legal question. I think probably we should have asked the Synthetic Fuels Corporation that question when they came in, shouldn't we? Let's find out about that.

Mr. **Garvey**. I will have my General Counsel look into that and furnish the information for the record.

[The information follows:]

The U.S. Synthetic Fuels Corporation Act, 42 U.S.C. 8701–8795 empowers the Synthetic Fuels Corporation to provide financial assistance and undertake construction projects and joint ventures. The Act exempts the Corporation from the operation of Federal laws unless the Act expressly provides otherwise. Two sections of the Act, sections 143 and 175, however, bind the Corporation to Federal environmental laws and the National Environmental Policy Act (NEPA) when the Corporation undertakes construction projects or joint ventures.

The National Historic Preservation Act (NHPA) is an environmental law. Not only does NEPA include historic preservation among its environmental goals, but the NHPA has been grouped with other environmental laws by other Federal statutes and by the courts. Therefore, it would appear that the Synthetic Fuels Corporation must comply with historic preservation laws and regulations when undertaking construction projects and joint ventures.

REVISED REGULATIONS

Mr. **Yates**. What is the status of your effort to revise the regulations in Section 106, or promulgated through Section 106?

Mr. **Aldrich**. I started quite early, back in June. I set up a task force headed by one of our expert Council members, the very able Tom Muths, a westerner and an architect. We went through a 7-month review of the regulations. I have never been happy, particularly when I was a state historic preservation officer, with the amount of detail required. I always felt this was one area where matters could be greatly streamlined without losing the kind of protection that the Act was designed to give.

Mr. Muths started working I think in August to develop new language, working very, very closely with John Fowler, our counsel. And on the 22nd of February, after a number of progress reports, of going back to the drawing board and ebb and flow with the full Council and with me and with other people, State Historic Preservation Officers included, we considered a draft which was subsequently adopted. By a vote of 15 to 4 the members adopted draft regulations which we submitted to the Vice President's Task Force on Regulatory Review.

And our purpose in doing that, which was the week after February 22 was to attempt to get at least a draft out in public for comment.

EXEMPTIONS

Mr. **Yates**. When are you going to have the exemption regulation issue resolved, do you think?

Mr. **Aldrich**. Well, we haven't got the first thing resolved, because when we went to the Vice President's Task Force and asked them for permission to publish the thing, they turned us down. They said this proposal was not what they had in mind. And at the moment I have referred this back to the Task Force.

I am hopeful that in the next meeting of the Advisory Council, which is towards the end of this month, May 25, we will be able to have another draft. There are ongoing discussions now with the staff of the Vice President's Task Force to see what they will accept. Perhaps by the end of the month we will have a draft of the basic regulations.

Now, on the exemptions, that comes later, doesn't it?

Mr. **Garvey**. The Task Force was asked last August to include at some point in its deliberations the questions of exemptions. Some of the Council members, in looking at that issue, Mr. Chairman, were very cautious about how that would be used. Others felt that this was a very creative way to encourage agencies to elevate their competence and to put their own programs in such a posture that they might be exempted from further scrutiny or review on some kind of routine and regular basis.

But the matter has been referred back to a group of Council members that are looking at regulatory matters. And they will meet on the 24th of this month, and that item is on their agenda for consideration.

Personally, I think that the Congress in providing that authority to this Council opened a door that will have very great benefits as time goes on. I can see the opportunity or the possibility for exempting any number of programs where there is no massive and wide-spread impairment of historic resources. If your in-house system works correctly, and everybody approaches their task in a responsible manner, the exemption is a very good tool to eliminate paperwork and streamline our activity. And that, as my chairman has said, is one of the things that we are trying to do.

IMPORTANCE OF STATE HISTORIC PRESERVATION OFFICERS

Mr. **Yates**. Of course. How important do you consider the work of the State preservation offices to be with reference to cooperation with your council?

Mr. **Aldrich**. I think it is absolutely critical.

Mr. **Yates**. What would happen if the States weren't able to continue because of the Administration's proposal to eliminate Federal support of the State offices?

Mr. **Aldrich**. Well, Congressman, I think I am getting into hot water again but——

Mr. **Yates**. Well, just refer Mr. Stockman over to us then.

Mr. **Aldrich**. Well, this time I may be in hot water with Mr. Jim Watt.

Mr. **Yates**. Then refer Mr. Watt over to us.

Mr. **Aldrich**. I personally disagree quite strongly with the notion that that is a good area to save money. It strikes me that if we are talking about Creative Federalism, that the example of getting the State Historic Preservation officers to do most of the work that is contained in the various pieces of historic preservation legislation, such as the placing of something on the National Register, or the Tax Act Certification Program, and then having the Federal Government pay for roughly half of that service, is a lot cheaper than doing it by having the Federal Government pay for all of it.

Mr. **Yates**. They do pretty good work don't they?

Mr. **Aldrich**. I used to be one of those guys.

Mr. **Yates**. I saw that in your biography, and of course my question was directed to the other States.

Mr. **Aldrich**. Well, let's say it is uneven, Mr. Chairman. Some of them do absolutely superb work, and as time goes on, they get better and better at it.

MEMORANDA OF AGREEMENT REDUCTIONS

Mr. **Yates**. That is good. Your justification has the number of memoranda of agreements reduced from 220 to 150 from fiscal years 1982 to 1983. Is that because of the cutback in your appropriations?

Mr. **Aldrich**. Yes.

Mr. **Yates**. If your appropriations weren't cut back, would you be having 220, or more memoranda of agreement? How many memoranda of agreements should there be? Are you cutting it back for lack of work, or is it for lack of funds, or what?

Mr. **Garvey**. The number cuts back, Mr. Chairman, in 1983 for two reasons. One is obviously we are going to have a constrained budget

Mr. **Yates**. Yes.

Mr. **Garvey**. Or a reduced budget, we are going to have——

Mr. **Yates**. You are not going to have the facilities for taking care of as many?

Mr. **Garvey**. We are just going to have to find some way to cut corners. That is all there is to it.

Mr. **Yates**. Unless you could train your personnel to either be smarter, more efficient, or to know how to handle them faster.

Mr. **Garvey**. Well, we intend to do some of that.

Mr. **Yates**. All right.

Mr. **Garvey**. But in spite of that, however, let me tell you, there is another aspect to that. And let me use the Forest Service as an example. At a meeting with Mr. Housley, the Deputy Chief, last week, we talked about the incident of project reviews that we have to do in a given forest, not by name, but in any one of their forests, and how we might curtail this if we could make an agreement on the forest plan as opposed to every activity that goes on in the forest. They have a good forest planning system now. It is more comprehensive than it was some years back. We talked about the possibility, neither one of us expecting for it to be completed in 1983, or maybe even by 1984, but the possibility of having an agreement on every forest plan that they produce. Well, this ultimately will give us 144 agreements out of the Forest Service. And under that 144 agreements there probably could be 10,000 projects, big, little or otherwise, that would happen over some given period. And I think our anticipation in 1983 is that there will be a certain amount, even with constrained resources, there will be a certain amount of programmatic kind of work of this sort where we will package a lot of things. And one memo of agreement will stand, instead of having 10 or 15 on lesser parts of someone's given program.

Mr. ALDRICH. I handle an average of about one case a day of matters that come up the line through the system. My feeling is that out of those some 360 or something a year, that a lot of them really shouldn't go through this long process all the way to the Chairman of the Council.

A lot of them are really very routine. Now, the trouble with making predictions in this area, it is like being a police commander and trying to predict how many traffic violations there are going to be. It is impossible to do.

INCREASED CHAIRMAN'S REVIEWS

Mr. YATES. What is the basis for estimating that the Chairman is going to have to review projects to a greater extent this year? You use the figures from 5 to 25. Any reason for that, or is that just a guess?

Mr. GARVEY. Well, the incident of referrals at the moment has grown in this particular year. And I think the occasion for that can be traced to Federal agencies looking at the review, the regulatory review process. And to be quite frank, I think there are some of them that have begun to stonewall us a little bit, Mr. Chairman, in the hopes that they are going to get this process, if they fight it hard enough, that that will have some bearing on what comes out of our regulatory review.

EVALUATION OF FEDERAL PROGRAMS

Mr. YATES. Why aren't you going to do any evaluation of Federal programs?

Mr. GARVEY. This is a new authority that we were given in the 1980 amendments.

Mr. YATES. Yes.

Mr. GARVEY. And if you recall when I was here last year, we talked about that as something we are going to gear up for. Our $1.9 million request to OMB included funds for evaluation, but that was the first cut.

Mr. YATES. What do you mean by evaluating a Federal program? What would you be doing if you had the money?

Mr. GARVEY. There are two authorities, one that we work with and make recommendations, and the other is that we make an evaluation of the Federal program. If I might call to your attention our annual report.

Mr. YATES. My attention has been called to it.

Mr. GARVEY. The first half of that is an overview of the Preservation Program in the whole of the United States. And we talk in general terms about trends, activities that let you know how we are moving towards economic as opposed to some other aspects of preservation.

The one thing that that does not do is to say that the Forest Service, because of programatic approaches to the forest plans in the fiscal year 1982 has done a superb job of elevating all of their cultural resource management. That is a hypothetical statement, not that it isn't true, but I mean in a hypothetical sense.

Mr. Yates. Well, I know. There has to be a peaceful relationship.

Mr. Garvey. The amendment of 1980, I think, anticipated that this Council would in fact do an annual overview of how the Federal establishment was doing its job pursuant to those amendments. And that takes a good deal of time. It takes people to talk, people to write, people to assess. And most particularly, someone to monitor all of the documentation we have received from agencies, the manner in which they are carrying out their preservation responsibilities and to put that into a concise report.

And frankly, under our budget request for $1 million, we don't anticipate having the funds to do that.

ANNUAL REPORT

Mr. Yates. Well, I read your report to the President for 1981, page 25. It says of the new Administration's approach: "On January 20, 1981, the new Administration took office, promising sweeping changes to effect a stronger, more economically sound Nation." No comment. "Selected for Secretary of the Interior was James Watt, a native of Wyoming and former Director of the Bureau of Outdoor Recreation under the Ford Administration. Secretary Watt articulated his approach to preservation in a speech to the National Trust for Historic Preservation. He noted that preservation was 'a vital component of our society' and 'meaningful in our lifestyle,' stressing its value as an important force in community improvement. Watt affirmed strong support for tax incentives to assist the private sector in rehabilitation, favoring this approach over direct Federal assistance. Speaking of a 'stringent' National Register," whatever that word means, "he indicated that he would be looking for ways to extricate the Federal Government from regulatory processes."

Are you extricated from regulatory processes? Or excuse me, is the Federal Government being extricated from your regulatory processes?

Mr. Garvey. That, Mr. Chairman, is what I was referring to a moment ago.

Mr. Yates. I know.

Mr. Garvey. I think there are some few of them that are attempting to do so. However, the fact remains that the Advisory Council has codified regulations for compliance with Section 106 of the Preservation Act, and those regulations are in place today and observed.

EMPHASIS ON TAX INCENTIVES

Mr. Yates. Yes. How much emphasis can be placed on tax incentives as opposed to direct Federal assistance? You are going to find out now, aren't you? As a matter of fact, if you were cut back to $500,000 from a million you would find out even more wouldn't you?

Mr. Garvey. That is correct.

ZERO FUNDING

Mr. **Yates**. Suppose you were cut out entirely, then you would find out even more. What would happen if you didn't have any money, and you relied entirely on tax incentives, what would be the effect of it?

Mr. **Garvey**. Well, as a matter of fact, I have never contemplated that situation, Mr. Chairman.

Mr. **Yates**. I read to you again what Mr. Watt states. "Watt affirmed strong support for tax incentives to assist the private sector in rehabilitation, favoring this approach over direct Federal assistance."

Now, what would happen if the Congress went along with Mr. Watt to the point where it cut out Federal funds entirely? What would be the effect of that?

Mr. **Aldrich**. I have already said I am against that, particularly with respect to the State Historic Preservation Officers.

Mr. **Yates**. Can you recover from your state of shock long enough to give me an answer, Mr. Garvey?

Mr. **Garvey**. Mr. Chairman, Mr. Watt made a speech in which he said those things.

Mr. **Yates**. I just quoted from it.

Mr. **Garvey**. We, in doing an overview of preservation for that particular year, felt it important to put that information in that book, and we did.

Mr. **Yates**. Yes, I know you did.

Mr. **Garvey**. Now, if Mr. Watt is talking about his grants to States, that is one thing. Mr. Watt is not talking about our budget insofar as I am able to ascertain it from his speech.

Mr. **Yates**. Well, I didn't get that impression from that quote. How do you get——

Mr. **Garvey**. He was not talking about our budget in that speech.

Mr. **Yates**. Why wasn't he talking about that budget?

Mr. **Garvey**. Well, he may have been, but it didn't occur to me that he was.

REGULATORY PROCESS

Mr. **Yates**. "Watt affirmed strong support of tax incentives . . . favoring this approach over direct Federal assistance." I would assume that that covers the grants, yes. But I would also assume that he is looking for ways to extricate the Federal Government from your regulatory processes, too. I would think that you could do that very well if you didn't have any money for the Advisory Council, couldn't you? You wouldn't have any regulation, would you?

Mr. **Aldrich**. I think there may be a distinction here that I am not seeing, but I look upon that language as freeing people out there in the general public from the regulatory requirements of the Federal Government.

Mr. **Yates**. Aren't you part of the Federal Government?

Mr. **Aldrich**. Yes.

Mr. **Yates**. Don't you have regulations?

Mr. **Aldrich**. Our regulations—oh, they are beneficient. They affect Federal agencies.

Mr. **Yates**. I see. They don't affect States and private people?

Mr. **Aldrich**. They certainly will affect States in discharging its historic preservation function. But it is basically aimed at the federally sponsored programs, you see?

Mr. **Yates**. I see.

Mr. **Aldrich**. That is the difference.

INFORMATION REQUESTS

Mr. **Yates**. What responses do you anticipate for information in 1983? Will there be a drop, or an increase?

Mr. **Garvey**. We estimate that we are going to drop that substantially, Mr. Chairman, because our role has been largely to refer people to other places. We get an awful lot of correspondence that should be directed to the Park Service, the National Trust, or other agencies and frequently we attempt to provide a document or whatever is useful. But in many instances we are just not going to be able to handle that.

STAFF REDUCTION

Mr. **Yates**. What are you going to have to do to reduce your staff? Are you going to have to RIF people or are you going to be able to do it by attrition?

Mr. **Garvey**. Not by attrition certainly but we have a number of temporary jobs. We just have 20 permanent people out of the 40 presently aboard. What we will do is simply terminate temporary jobs.

Mr. **Yates**. What about severance payments, are you going to have to make a provision for severance payments?

Mr. **Garvey**. We are.

Mr. **Yates**. Is that in your budget?

Mr. **Garvey**. It is not.

Mr. **Yates**. Why is it not?

Mr. **Garvey**. Because we are going to terminate people in advance of October 1, far enough to be able to take the severance pay out of 1982.

Mr. **Yates**. Out of 1982. Well then, will you have to have a supplemental request?

Mr. **Garvey**. No, sir, we are going to do it out of the funds that have been appropriated to us which means that by June we will have people begin leaving the staff.

Mr. **Yates**. What happens to your services?

Mr. **Garvey**. They will begin to diminish correspondingly.

Mr. **Yates**. Will you have to do it by private contract? You won't have the funds for that either?

Mr. **Aldrich**. We won't have the funds for that.

Mr. **Garvey**. We won't have the funds for anything.

DONATIONS

Mr. **Yates**. Does your Council actively solicit donations?

Mr. **Garvey**. We do not.

Mr. **Yates**. Are there any restrictions on the use of donated funds?

Mr. **Garvey**. No, sir.

Mr. **Yates**. Do you receive donations?

Mr. **Garvey**. We are authorized to receive them, and the only restriction has been that the Council adopted a process whereby the Chairman has to take certain actions before any donated funds can be disbursed.

Mr. **Yates**. How much did you receive during fiscal year 1981?

Mr. **Garvey**. $1,000.

CLOSING REMARKS

Mr. **Yates**. Good luck. You have a job on your hands.

Let me ask you a question. I happen to believe that your work is good work. Have I asked you this, Mr. Aldrich? How badly will you be hurt with the cut? I have asked you that.

Mr. **Aldrich**. You asked me how I felt about it and my response was I felt rotten about it.

Mr. **Yates**. I asked you to elaborate for the record the effect of the cut of $900,000 that the OMB asked for.

I think you ought to supplement that by also saying what the effect would be of cutting your last year's appropriation by $500,000.

Thank you very much.

I do have some questions for the record and I will ask you to respond too.

[The questions and answers follows:]

ADDITIONAL COMMITTEE QUESTIONS

Question: What training program have you developed to acquaint Federal, State, and local officials with the Federal environmental review system for historic and cultural programs? How widely has your training program been disseminated?

Answer: The Council offers, on a regularly-scheduled basis, a two-day training course, "Introduction to Federal Projects and Historic Preservation Law." The course explains, in a clear and understandable way, the Section 106 review process an agency participates in when any of its projects affect historic properties, or uses Federal money, or needs a Federal license. It uses lectures, slide shows, a film and case studies, based upon actual Council cases, to provide a varied program. Classes are limited to 30 persons; the course format encourages discussion and participation by course members.

Upon completion of the course, trainees know:

- what Section 106 review is, and when it is required
- what is contained in 36 CFR Part 800, regulations of the Advisory Council on Historic Preservation
- what other Federal laws apply to historic preservation review
- what actions - step-by-step - are required by Federal, State and local officials in complying with Federal preservation laws and regulations. Such actions include identifying cultural properties, assessing the effect of projects on cultural properties, and developing "mitigation measures."
- the difference between the functions of the Council, the Department of the Interior, the National Conference of SHPOs, the National Trust for Historic Preservation, and other related agencies and organizations.

The course is sponsored jointly by the Council and the Office of Personnel Management, Management Sciences Training Center, which has included it in its regular course offerings nationwide. The cost is $145 for two days. The course is offered to any Federal, State or local officials, and is also available for special on-site presentation to any agency which wishes to sponsor a session.

During FY82, the course will have been offered eight times: in Atlanta, GA (special HUD course); in Washington, DC (three times as an open course); in Chicago (as an open course); in Denver (as an open course); in San Francisco (open course); and in Portland, OR (as a special course for the U. S. Army Corps of Engineers).

Question: Provide for the record a list of the 19 members of the Advisory Council.

**Advisory
Council On
Historic
Preservation**

Membership
May 1982

1522 K Street, NW
Washington, DC 20005

The National Historic Preservation Act Amendments of 1980, P.L. 96-515, establish specific categories of membership. The year in parentheses indicates membership expiration.

-- Four members of the general public appointed by the President, including the Chairman.

Alexander Aldrich, Chairman (1985)
493 Broadway
Saratoga Springs, New York 12866

Armand S. Deutsch, Vice Chairman (1982)
1901 Avenue of the Stars, Suite 1243
Los Angeles, California 90067

Calvin W. Carter (1985)
P.O. Box 2521
Tampa, Florida 33602

Gerald M. Wallette (1984)
200 East 82nd Street, #18-H
New York, New York 10028

-- Four historic preservation experts appointed by the President from the disciplines of architecture, history, archeology, and other appropriate disciplines.

Steven F. Arvizu (1984)
4516 North Park Drive
Sacramento, California 95821

Frances R. Edmunds
Director
Historic Charleston Foundation
51 Meeting Street
Charleston, South Carolina 29401

Joseph B. Mahan, Jr. (1983)
2339 Burton Street
Columbus, Georgia 31904

Thomas B. Muths, AIA (1982)
Post Office Box FF
Jackson, Wyoming 83001

-- One governor and one mayor.

Honorable J. Joseph Garrahy (1985)
Governor of Rhode Island
Providence, Rhode Island 02903

Governor's Observer

Frederick C. Williamson, Director
Rhode Island Department of
Community Affairs
150 Washington Street
Providence, Rhode Island 02903

Honorable Lawrence F. Kramer (1985)
Mayor of Paterson
City Hall, 155 Market Street
Paterson, New Jersey 07505

-- Secretary of the Interior, Architect of the Capitol, Secretary of Agriculture, and the heads of four other agencies (other than the Department of the Interior), the activities of which affect historic preservation, appointed by the President. Agency heads can only designate as their alternate an Assistant Secretary or an officer having major department-wide of agency-wide responsibilities.

Honorable James G. Watt
Secretary of the Interior
Washington, D.C. 20240

Designee: Honorable G. Ray Arnett
Assistant Secretary --
Fish & Wildlife & Parks

Designee: Mr. Ric Davidge
Special Assistant to the
Assistant Secretary --
Fish & Wildlife & Parks

Honorable George M. White, FAIA
Architect of the Capitol
Washington, D.C. 20510

Designee: Mr. William L. Ensign, FAIA
Assistant Architect
of the Capitol

Designee: Mr. Elliott Carroll, FAIA
Executive Assistant

Honorable John R. Block
Secretary of Agriculture
Washington, D.C. 20250

Designee: Dr. Janet Friedman
Historic Preservation
Officer

Honorable Donald T. Regan
Secretary of the Treasury
Washington, D.C. 20220

Designee: Honorable Cora P. Beebe
Assistant Secretary
(Administration)

Honorable Gerald P. Carmen
General Services Administrator
Washington, D.C. 20405

Designee: Honorable Richard O. Haase
Public Buildings Commissioner

Designee: Mr. J. Walter Roth, AIA
Director, Preservation Staff
Historic Preservation Officer

Honorable Samuel R. Pierce, Jr.
Secretary of Housing and
Urban Development
Washington, D.C. 20410

Designee: Honorable Stephen Bollinger
Assistant Secretary for
Community Planning
and Development

Designee: Mr. Stuart Sloame
Deputy Assistant Secretary
for Field Operations and
Environment/Energy Programs

Designee: Mr. Richard H. Broun
Director, Office of
Environment and Energy

Honorable Drew Lewis
Secretary of Transportation
Washington, D.C. 20590

Designee: Honorable Judith T. Connor
Assistant Secretary, Policy
and International Affairs

Designee: Mr. Robert Crecco
Historic Preservation Officer

-- Chairman of the National Trust for Historic Preservation.

Honorable Alan S. Boyd
Chairman, National Trust for
Historic Preservation
1785 Massachusetts Avenue, NW
Washington, D.C. 20036

Designee: Mr. Michael L. Ainslie
President

Designee: Mr. Russell V. Keune
Senior Vice President

-- President of the National Conference of State Historic Preservation Officers.

Mr. J. Rodney Little
John Shaw House
21 State Circle
Annapolis, Maryland 21401

Designee: Mr. Charles E. Lee
Vice President
Director, State Archives Department
1430 Senate Street
Columbia, South Carolina 29211

-- With the concurrence of a majority of the membership, the Chairman may invite representatives of Federal, State, or local public agencies or non-profit organizations to become observers when the participation of such agencies or organizations will benefit the Council.

Honorable S. Dillon Ripley
Secretary of the Smithsonian Institution
Washington, D.C. 20560

Designee: Honorable Paul N. Perrot
Assistant Secretary for Museum Programs

Question: Over the last year, what progress have Federal agencies made in developing their internal preservation program?

Answer: Despite the mandate of the 1980 amendments, the last year has seen reductions and retrenchment by Federal agencies more than program development. This naturally reflects new fiscal constraints, but it is our observation that fiscal cutbacks have affected historic preservation programs disproportionately. In any event, we cannot point to any agency program that has made significant progress in the last year vis-a-vis previous years.

Question: Which agencies have established the most effective programs?

Answer: In terms of pure preservation of historic properties, it is safe to say that the internal programs of the National Park Service are the most effective. This is not to say that Park Service programs are without problems, but on the whole, the Park Service manages its historic properties with a minimum of difficulty and conflict. Among agencies whose missions are not so strongly oriented toward preservation, the civil works programs of the Corps of Engineers embody some of the most effective preservation planning. The Forest Service has also made very impressive progress over the last several years, and preservation seems to be at least holding its own there at the moment. There has also been notable progress within the uniformed Army in the last few years -- that is, within Army commands concerned with installation management and training. A number of Army installations now have historic preservation plans, or are developing them, to ensure that they can proceed with their missions with minimum damage to historic properties.

Question: Which have the least effective programs?

Answer: The least effective programs tend to be those that are most complicated, involving the largest numbers of participants. For example, we have seen little progress in historic preservation program development within the Department of Housing and Urban Development; this seems to result directly from the extremely complicated nature of HUD programs, their extreme decentralization, and their tendency to delegate responsibilities to field offices, State agencies, and City governments. The Bureau of Land Management has somewhat similar problems, in that responsibilities are delegated so far down the chain of command that the active parties often lack the training, facilities, personnel, and even authority to carry them out. Decentralization and delegation are understandable and appropriate for many good and justifable policy reasons, but the fact remains that they do make for complicated, uneven, historic preservation programs.

Question: How does the capability of other Federal programs affect the review process?

Answer: The capability of Federal agency programs affects the review process greatly. Where program officials understand historic preservation concerns and processes, and are in structural positions to make sure they are addressed early in project planning, the review process is easy, quick, and productive. When the agency program is not effective in this manner, review may not occur at all, litigation may result, and if review does occur it oftens happens after so many options have been foreclosed that there is virtually nothing to be done to improve matters. Conflicts, project delays, and needless losses of historic properties result.

Question: Beyond persuasion, what positive actions are you taking to assure that all agencies will have effective preservation programs?

Answer: We have no real authority to do anything beyond persuasion to assure that agencies will have effective preservation programs. We do make every effort to use our project review activities to encourage program development; for example, when a project review process is burdened with conflict and difficulty, we try to point out to the responsible agency how the process would be facilitated by better program development, and initiate consultation to establish such a program under the terms of a Programmatic Memorandum of Agreement or Counterpart Regulations.

The following are current activities promoting preservation program development:

* Consultation with the Office of Surface Mining, Department of the Interior, toward a Programmatic Memorandum of Agreement and counterpart regulations for surface coal mining (recently begun).

* Consultation with the Soil Conservation Service on counterpart regulations (essentially concluded, regulations undergoing internal SCS review).

* Consultation with Bureau of Land Management on counterpart regulations (draft regulations undergoing internal BLM review).

* Consultation with Forest Service on counterpart regulations and better integration of preservation into Forest Plans (in progress).

* Participation in pilot project by Corps of Engineers on development of regional preservation plan, Louisville District (in progress).

* Consultation with U.S. Army Training and Doctrine Command on Programmatic Memorandum of Agreement for management of installations and training exercises, and development of preservation plans at Fort Bliss, Carson, and Irwin (in progress).

* Consultation with HUD regarding programs to treat archeological sites in connection with mortgage guarantees for housing projects, and regarding rehabilitation of historic buildings for low-income and elderly housing (in progress).

* Consultation with a large number of Interior and Agriculture agencies to establish a consistent interagency approach to preservation in connection with energy development in the San Juan Basin of New Mexico, Colorado, Utah and Arizona (undergoing interagency review).

* Consultation with the New Mexico State Historic Preservation Officer and the BLM to develop a Programmatic Memorandum of Agreement covering all BLM projects in the State (undergoing internal BLM review).

- * Consultation with the California State Historic Preservation Officer and the Federal Highway Administration to develop a Programmatic Memorandum of Agreement covering all bridge replacement projects in the state (in progress).

- * Consultation with the Veterans' Administration to conclude a Programmatic Memorandum of Agreement covering administration of cemeteries (undergoing internal VA review).

- * Consultation with several National Forests to establish preservation plans and Programmatic Agreements covering all Forest activities (in progress).

- * Seeking to initiate consultation with the Offce of Micronesian States Negotiations in the Department of the Interior, regarding preservation programs in connection with termination of the United States Trusteeship in Micronesia (pursuant to Council Report issued August 25, 1981.

- * Consultation with National Park Service regarding leases and exchanges of historic properties.

Question: What degree of cooperation is there between the Federal agencies and the State Historic Preservation Offices?

Answer: This varies widely from agency and state to state. I think the best we can do in response to this question is to provide some examples of the best and the worst.

An excellent example of agency-state cooperation is provided by a program now being undertaken by the U.S. Army Corps of Engineers, in cooperation with the National Park Service, the Council, and the State Historic Preservation Officers in Ohio, Kentucky, Indiana, and Illinois, to develop a regional historic preservation plan for the entire Louisville District of the Corps. The idea is to establish preservation planning standards, survey methods, and preservation priorities for the Louisville District that are as compatible as possible with the State Historic Preservation Plans prepared by the several states. The Corps is actually contracting with the four State Historic Preservation Officers to develop this plan, in consultation with the District, the NPS, and the Council. In this instance the agency and the states are working literally hand in glove on a project that should make for much improved preservation planning on Corps projects in the region in the future.

On the other end of the scale, in most parts of the nation there is little or no cooperation between the Corps of Engineers and the State Historic Preservation Officers with respect to the issuance of permits for the discharge of fill into waterways and wetlands. The Corps tends to do very little to ensure that historic properties are properly identified and considered in planning projects that require such permits; instead simply sending a notice to the State and expecting the Historic Preservation Officer to "blow the whistle" if he or she happens to know of an important historic property that will be threatened. Since the SHPOs are not equipped to undertake the surveys neccessary to determine whether properties will be threatened, they tend to send back formletters advising the Corps to insist that the applicant for the permit undertake surveys and protective measures. The Corps recognizes these formletters for what they are, and ignores them.

This sort of variety is typical of most agencies, and it is complicated by variety among State and among Regional Offices of the agencies. Some Area Offices of the Department of Housing and Urban Development, for example, are in constant contact with State Historic Preservation Officers and work with them very well on most projects, while others seem almost to ignore the SHPO's existence. States, too, vary widely in their approach. The Utah State Historic Preservation Officer, for example, regards himself as consultant to Federal agencies and regulated industry, dealing with them only at their request, while in New Mexico, the State Historic Preservation Officer makes an aggressive effort to find, educate, and consult with agencies about historic preservation. Variability among states should not be overemphasized, however; although we cannot quantify this observation, it certainly seems to us that we see a higher degree of consistency in approach among the State Historic Preservation Officers than among Federal agencies and even among field offices of individual agencies.

Question: Part of your workload for FY 1982 is a special course for local officials. Please describe what the local training course is. What response have you had from local officials?

Answer: Special sessions of the Council's ongoing training course, "Introduction To Federal Projects and Historic Preservation Law" had been planned on a no-cost basis to local officials. It had been the Council's intention to offer our basic Section 106 training program, with added special information for local officials about their role as a "Federal surrogate" under HUD UDAG and CDBG programs. As well, information about local certification of historic preservation programs has been planned.

However, the Council regulations have been under review this year, and to date proposed revisions have not been approved by OMB. Also, no new regulations concerning local certification of historic preservation programs have been completed by the Department of the Interior. Under the circumstances, we believe it is best to postpone such special training for local officials until these matters have become resolved, and appropriate special local training information can be accurately developed.

Question: What is the nature of the information requests you receive?

Answer: For the most part, information requests we receive are focused on specific publications produced by the Council about Council matters or historic preservation issues. During 1981, we received over 1300 information requests, which resulted in the distribution of 3300 copies of Council publications, all within 5 days of receipt of the request.

Using April 1982 as a sample month, we received 116 inquiries by mail and telephone and sent out 180 publications all in response. Of this number, 54 were copies of the "National Historic Preservation Act of 1966, As Amended" (released in October 1981) and 27 were for "Report to the President and Congress 1981" (released in February 1982).

Occasionally letters are received which require referral to another organization. Usually these involve grants-in-aid or listings in the National Register of Historic Places. In all cases, the letters are sent to the appropriate group. These requests never amount to more than 10% of the total.

In 1981, the Council experienced a 32% increase over the number of 1980 information requests, and an 83% increase over the total for 1979.

Question: Most of our agencies have experienced increases in their standard level user charges (office space rental), but yours is cut in half? -- How are you able to reduce your request by 50%? and Will the reduction involve a move?

Answer: Presently we occupy 6,675 square feet of space in a commercial building in downtown Washington. GSA has advised that the lease will not be renewed after the expiration date of August 31, 1982. We are negotiating with GSA to relocate in the downtown area. With a reduced staff and limited funds we will consolidate into about 3,500 square feet. We expect to pay about $48,000 for rent in 1983. Also, our Denver office is expected to pay $12,000.

Question: What other services are you reducing since the requests drops from $93,000 in FY 1982 to $35,000 in FY 1983?

In FY 1982 we expect to reimburse the Department of the Interior $55,000 for fiscal, personnel and administrative services. Maintenance contracts on word processing equipment, typewriter and other equipment cost about $14,000; blanket purchase orders for services such as film developing, special printing and graphic work, and for small purchases cost $10,000; and our small imprest fund to cover office supplies and miscellaneous expenses will cost $4,000. In addition we awarded a small contract to assist us in the study and appraisal of Federalism and the impact on state and local government for $10,000.

In FY 1983 we expect to reimburse the Department of the Interior $25,000, and to limit all other services to $10,000.

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MONDAY, MARCH 29, 1982.

BUREAU OF LAND MANAGEMENT

WITNESSES

GARREY E. CARRUTHERS, ASSISTANT SECRETARY, LAND AND WATER RESOURCES

ROBERT BURFORD, DIRECTOR, BUREAU OF LAND MANAGEMENT

JAMES PARKER, ASSOCIATE DIRECTOR, BUREAU OF LAND MANAGEMENT

DELMAR VAIL, DEPUTY DIRECTOR FOR LANDS AND RENEWABLE RESOURCES, BUREAU OF LAND MANAGEMENT

SANDRA BLACKSTONE, DEPUTY DIRECTOR FOR ENERGY AND MINERAL RESOURCES, BUREAU OF LAND MANAGEMENT

ARNOLD PETTY, DEPUTY DIRECTOR FOR MANAGEMENT SERVICES, BUREAU OF LAND MANAGEMENT

ROGER HILDEBEIDEL, CHIEF, OFFICE OF BUDGET, BUREAU OF LAND MANAGEMENT

JOSEPH W. GORRELL, DIRECTOR, OFFICE OF BUDGET, OFFICE OF THE SECRETARY

Mr. YATES. This is the hearing on the request for appropriations for fiscal year 1983 for the Bureau of Land Management. We will also consider the Bureau's request for a fiscal year 1982 pay supplemental, which has been approved by OMB, in the amount of $3,728,000.

Appearing in support of the budget is Mr. Garrey Carruthers, Assistant Secretary for Land and Water Resources; Mr. Burford, Director of the Bureau of Land Management; Mr. Parker, the Associate Director, Bureau of Land Management; Mr. Vail, Deputy Director from the Bureau of Land Management; Sandra Blackstone, Deputy Director for Energy and Mineral Resources, Bureau of Land Management. How did you get in with all the men?

Ms. BLACKSTONE. That is a good question. They couldn't resist. They couldn't pass up the opportunity.

Mr. YATES. Who is they?

Ms. BLACKSTONE. The Director, primarily.

Mr. YATES. Okay, Arnold Petty, Deputy Director for Management Services. Mr. Hildebeidel, do I pronounce that correctly?

Mr. HILDEBEIDEL. Yes, sir.

Mr. YATES. Chief of the Office of Budget. And Mr. Gorrell, Director of the Office of Budget, Office of the Secretary.

The biography of Dr. Carruthers may be inserted in the record as may the biographies of Mr. Burford, Mr. Parker, Mr. Vail, Ms. Blackstone and Mr. Hildebeidel.

[The biographies follow:]

BIOGRAPHY

DR. GARREY E. CARRUTHERS

Dr. Garrey E. Carruthers was nominated by President Reagan as Assistant Secretary of the Interior for Land and Water Resources on March 2, 1981, and was confirmed by the U. S. Senate on May 7, 1981.

Born in Alamosa, Colorado, August 29, 1939, Carruthers grew up in Las Cruces, New Mexico. He earned B.S. and M.S. Degrees in Agriculture and Agricultural Economics from New Mexico State University, and a Ph.D in Economics from Iowa State University.

From 1968 to 1979, he was Assistant Professor and later Associate Professor in New Mexico State's Department of Agricultural Economics and Agricultural Business. He attained full professorship in July, 1979.

From September 1974 to August 1975, he was a Special Assistant to the U. S. Secretary of Agriculture and a White House Fellow. From July 1976 to March 1978, he served as Acting Director of the New Mexico Water Resources Research Institute.

He is a member of the American Agricultural Economics Association, the Western Agricultural Economics Association, and the American Academy of Political and Social Services. He also belongs to Sigma Xi, Omicron Delta Kappa, and other educational organizations.

Dr. Carruthers and his wife Katherine live in Springfield, Virginia. They have three children.

ROBERT F. BURFORD

Mr. Burford was born in Grand Junction, Colorado, February 5, 1923. He holds an Engineer of Mines Degree from the Colorado School of Mines, 1944. He served in the U.S. Marine Corps, World War II Pacific Theatre, from 1944-46. From 1948-49 he was employed by Permanente (Kaiser) Aluminum Company, California and Jamaica, as Mining Engineer.

Mr. Burford owned and operated sheep and cattle ranches in Eagle and Mesa Counties, Colorado from 1949 until he was appointed Director of the Bureau of Land Management in May, 1981. From 1974-80 he was elected (3 terms) to the Colorado House of Representatives from District 54. In 1976, he was appointed Chairman, Local Government Committee, Colorado House of Representatives, and in 1979, elected Speaker, Colorado House of Representatives.

Mr. Burford has four children: a daughter, Joyce, who attends the University of Colorado, and three grown sons in various businesses.

MEMBERSHIPS

Colorado Cattlemen's Association	1955-on
Colorado Woolgrower's Association--Past 1st Vice President	1946-on
Mesa County Woolgrower's Association--Past Secretary, Vice-President, President	1946-on
National Cattlemen's Association	1975-on
Colorado Farm Bureau	1950
A.F. and A.M., Fruita, Colorado	1944-on
Professional Engineers of Colorado, Ute Chapter	1977-on
Western Slope Quarterhorse Association--Past President	1970-on
Board of Directors, First National Bank of Grand Junction, CO	1979-on
Member, Board of Directors, St. Mary's Hospital, Grand Junction, CO	1980-on
Member, Board of Directors, Reed Miller, Inc., Grand Junction, CO (Hertz Franchise)	1976-on
Member, Bureau of Land Management Grazing Advisory Board, Grand Junction, Colorado District	1969-73
Member, Bureau of Land Management Grazing Advisory Board, Glenwood Springs, Colorado District	1967-73
Member, Colorado State Grazing Advisory Panel	1970-71
Alternate, National Grazing Advisory Board	1971
Chairman, Eagle County Republic Central Committee	1961-69
Member, Colorado State Republican Central Committee	1961-69 1974-80

HONORS

Who's Who in America	1980-81
Who's Who in West	1980-81
Who's Who in Politics	1975-76 1977-78 1979-80

JAMES M. PARKER

Mr. Parker's BLM career began in 1960 as a management analyst. He moved through the ranks in the Bureau's Denver Service Center and Washington Office, eventually becoming Chief, Division of Management Research between 1974-1977. He served for a full year as project manager of the President's Reorganization Project for the Interior Department in 1977-1978 and served in the U.S. Army from 1956-1959.

Mr. Parker took a three-year leave of absence from 1978-1981 to serve his church in Finland. In December 1981, he was appointed as Associate Director of BLM.

He is a Utah native. In 1953 he received an Associate degree from Weber State College in Ogden, Utah and a Bachelor of Arts degree from Brigham Young University in Provo in 1960. He has completed most of the requirements for a Master of Arts degree in government administration from George Washington University.

Mr. Parker is married to the former Beverly Benson of Salt Lake City. They reside in Springfield, Virginia, with their four children.

DELMAR D. VAIL

Delmar D. Vail joined the Bureau of Land Management in 1956 and served until 1964 as Range Conservationist, Area Manager, Fire Control Officer, and Assistant District Manager, all in the Burley (Idaho) District.

From 1964-67 he was Assistant District Manager of the Boise (Idaho) District Office, from 1967-69 District Manager of the Cedar City (Utah) District Office, from 1969-71 District Manager of the Folsom (California) District Office, and from 1971-76 District Manager of the Riverside (California) District Office.

From 1976-80 Mr. Vail served as Associate State Director of the Wyoming State Office. From 1980-September 1981 he served as Assistant Director - Renewable Resources in the Washington Office. In September 1981 he was named Deputy Director for Lands and Renewable Resources.

He served in the U.S. Marine Corps from 1953-55 and received a Bachelor of Science degree in Range Management from the University of Idaho.

He is married and the father of four grown daughters. Mr. Vail was born September 2, 1929, and is a native of Idaho.

SANDRA L. BLACKSTONE

Deputy Director, Energy and Mineral Resources
Bureau of Land Management
U. S. Department of the Interior

Ms. Blackstone was named Deputy Director for Energy and Mineral Resources in July 1981. Prior to joining BLM, Ms. Blackstone served in management, legal, and consulting capacities on energy and mineral-related issues for both public and private sector organizations. Previous positions include Manager of Business Development for Synthetic Fuels with Rocky Mountain Energy Co., consultant to W. R. Grace and Co., Colowyo Coal Co., Colorado School of Mines, and Colorado Energy Research Institute, and associate with the law firm Dawson, Nagel, Sherman and Howard. She holds a Ph.D. in Mineral Economics from Colorado School of Mines (1979), J.D. from University of Denver College of Law (1977), and B.A. at University of Vermont (1969). Ms. Blackstone is a member of the American, Colorado and Denver Bar Associations, and the Colorado Advisory Council on Energy Research.

ROGER L. HILDEBEIDEL

Roger L. Hildebeidel became Budget Officer of the Bureau of Land Management (BLM) on December 6, 1981. As Budget Officer, he reports to the Bureau Director and is responsible for coordination and oversight of all BLM budget formulation and budget execution activities, including the development of budget estimates and justifications, the execution of appropriations, the Bureau's Annual Work Plan, Bureauwide fund controls and manpower allocations; and for advising the Director and other BLM officials on budgetary matters.

From January 1980 to December 1981, Mr. Hildebeidel was the BLM Eastern States Director, headquartered in Alexandria, Virginia, and directed BLM field operations, largely mineral leasing, lands and realty operations and cadastral surveys in the 31 states bordering on or east of the Mississippi River. Other assignments with BLM include nearly 4 and one-half years (January 1975 to May 1979) as Chief, Office of Program Evaluation and six months as Acting Deputy Director for Policy, Program and Budget (May 1979 to November 1979) both in the Bureau Headquarters Office.

Mr. Hildebeidel's budget experience encompasses 10 years of progressively responsible budgetary duties beginning as a Budget Analyst in the BLM Budget Office from June 1965 to March 1969. He then served as a Budget Examiner in the Office of Management and Budget (OMB) and its predecessor, Bureau of the Budget, from 1969 to 1972. His responsibilities there included review of the budgets, legislative proposals, and programs of the Federal Highway Administration and National Highway Traffic Safety Administration of the Department of Transportation. From November 1972 to January 1975, Mr. Hildebeidel was the Budget Officer of the Domestic and International Business Administration of the Department of Commerce. He returned to BLM early in January 1975.

Mr. Hildebeidel was born on September 24, 1942, in Allentown, Pennsylvania. He graduated from Franklin and Marshall College, Lancaster, Pennsylvania, in 1964 (A.B., majoring in Government, graduated with Departmental Honors and Phi Beta Kappa). He also received a Master of Public Administration degree with highest distinction from the Maxwell School of Syracuse University, Syracuse, New York, in 1965.

He was awarded the Meritorious Service Award of the Department of the Interior in December 1980.

Mr. **Yates**. Ms. Blackstone is a Ph. D. That shouldn't be "Ms.", then, it ought to be "doctor." You are a doctor of mineral economics and a J. D.—two doctorates, she is a double doctor—from the University of Denver College of Law. How did you ever go east to the University of Vermont?

Ms. **Blackstone**. Pardon?

Mr. **Yates**. I was just talking to myself. I always thought the Greeley advice was, "Go West young man." That is the influence of ERA.

Mr. **Burford**. We have also changed in our hiring practices, to hire a young lady.

Ms. **Blackstone**. I appreciate the "young."

Mr. **Yates**. Assistant Secretary Carruthers has a statement and Mr. Burford has a statement; both may go into the record at this point.

[The statements of Mr. Carruthers and Mr. Burford follow:]

STATEMENT OF GARREY E. CARRUTHERS, ASSISTANT SECRETARY, LAND AND WATER RESOURCES, DEPARTMENT OF THE INTERIOR

BEFORE THE

HOUSE COMMITTEE ON APPROPRIATIONS, SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES APPROPRIATIONS

March 29, 1982

Mr. Chairman and members of the Committee:

I appreciate the opportunity to accompany Bob Burford and the BLM Directorate in support of the President's FY 1983 budget request for the Bureau of Land Management. Initial preparations for this budget request began shortly after we started in our present positions. The results fully reflect the goals established by President Reagan, Secretary Watt, and his team at the Department of the Interior. There are some significant and positive changes in this FY 1983 budget request for BLM; although we intend to maintain a strong multiple-use role for the Bureau.

Director Burford will discuss specific details of the budget request. I would like to share some of the philosophical considerations reflected in our proposals. We are strongly committed to the cost effective development of Federal energy and mineral resources. We have introduced procedures to streamline energy and mineral leasing by reducing procedural burdens. We have taken action to eliminate the lease application backlog by the end of this calendar year. We are requesting some appropriations reductions in renewable resources management; however, we are introducing a number of operating efficiencies to enable the Bureau to maintain the same or even an improved level of work. We have applied some sound management principles to the programs of the Bureau of Land Management in order to effect cost savings and to promise better service to the citizen/owner/user of the public lands. We have conducted a careful review of BLM operating regulations and are revising several of them to result in savings of time and money to the Bureau and the public.

The Director and I have spent a great deal of time over the last year meeting with Bureau managers and employees at all levels. As we shared our ideas with them and listened carefully to their suggestions, we found the professional land managers of the Bureau of Land Management to be diverse in background and talents and unified in their concern that the public lands receive the best management possible. Many of the ideas we have implemented, such as the selective management grazing program, have surfaced from within the Bureau. Secretary Watt often refers to our temporary stewardship responsibilities in Interior as a concept that will be made to live for years by the career employees. The response to our changes has been gratifying.

Changes in the Bureau's planning system, resource inventory procedures, and district office authorities are the combined efforts of many BLM employees and have received our strong endorsement. A major new challenge for the Bureau will be its execution of the President's asset management program. This initiative has many purposes. The benefits to the public should be many. There is in the Bureau a real understanding of the economic problems of the Nation and the opportunities within BLM to aid in their resolution. I think our FY 1983 budget proposals demonstrate some of the new directions the BLM is moving toward. There will be further changes, but with the continued leadership of Bob Burford and the dynamic efforts of the Bureau's employees those changes will be positive improvements for the Bureau of Land Management and the public's resources.

STATEMENT OF ROBERT F. BURFORD, DIRECTOR, BUREAU OF LAND MANAGEMENT

BEFORE THE

HOUSE COMMITTEE ON APPROPRIATIONS, SUBCOMMITTEE ON INTERIOR AND RELATED AGENCIES APPROPRIATIONS

March 29-30, 1982

Mr. Chairman and members of the Committee:

I appreciate the opportunity to testify today in support of the President's FY 1983 Budget request for the Bureau of Land Management (BLM). The 1983 budget aggressively promotes a program of multiple use management of the Public Lands and their resources and, in my view, represents a balanced and orderly approach to the use, development, and protection of these lands which provide a broad spectrum of public benefits.

The Bureau manages about 325 million acres of Public Lands, located in 28 States, including currently 150 million acres in Alaska. The Bureau also administers the mineral estate for another 370 million acres where Federal minerals underlie other ownerships and on more than one billion acres of submerged lands on the Outer Continental Shelf (OCS). The Federal Land Policy and Management Act, enacted in 1976, established the policies and purposes which guide the actions of the Bureau in managing the use, development, and protection of the Public Lands. The Outer Continental Shelf Lands Act, as amended in 1978, provides the framework for the leasing of offshore energy and mineral resources.

Within this budget, the President and the Secretary of the Interior are requesting increased funding to facilitate accelerated development of domestic energy resources within the framework of sound multiple-use management. These increases are targeted to both onshore and offshore oil and gas, geothermal, oil shale, and tar sands leasing. We are also requesting increases in non-energy minerals programs and in our lands and realty management programs. While no increases are requested for our renewable resources programs, we will continue to manage the renewable resources of the Public Lands in a manner which effectively conserves, develops, and utilizes these important timber, rangeland, watershed and recreational resources within the multiple-use context.

BLM's programs return substantial revenues to the Treasury from the receipts collected as rents, royalties, and bonuses from OCS and onshore oil and gas leases, other minerals leases, from timber sales, and grazing fees. We estimate that $19.8 billion will be generated from these sources in 1983; with $18 billion of this total coming from OCS revenue. These OCS receipts are used to help offset government-wide expenditures.

The total BLM budget request for 1983 is almost $1.26 billion, an increase of $117.2 million over the FY 1982 appropriations enacted to date. Of this total, nearly $756.5 million is estimated for payments to states and counties in the form of shared revenue, and $45 million is proposed for payments to counties in lieu of taxes. These amounts make up nearly 64 percent of the total BLM FY 1983 Budget. The remaining $455 million of the request will finance the operation of BLM land and resource management programs. These operating funds will support a BLM employment level of 10,368 full-time equivalent (FTE) personnel in FY 1983, a decrease of 280 FTE from the FY 1982 budgeted level.

Of the total $1.26 billion, $761 million of the appropriations are available through permanent appropriations without current Congressional action. The President's Budget requests Congressional action to appropriate a total of $495.3 million to BLM in seven separate appropriations, including $45 million for Payments in Lieu of Taxes, which is requested contingent upon proposed legislative change.

MANAGEMENT OF LANDS AND RESOURCES

BLM's largest operating appropriation is the "Management of Lands and Resources" appropriation for which we are requesting $373,527,000 for FY 1983. This is an increase of $18.2 million over the FY 1982 appropriation enacted to date and a program increase of $1,748,000 over the FY 1983 base. We are also requesting an FY 1982 supplemental appropriation of $60 million for firefighting expenses.

I would like to highlight the major items of the FY 1983 request.

Energy and Minerals Management

The energy and minerals program request for FY 1983 is $98.9 million, an increase of $7.6 million over the FY 1983 base. For the onshore oil and gas leasing program, an increase of $3,750,000 will provide increased capability for expanded leasing as well as for post-lease actions resulting from the acceleration of leasing in 1982. We plan to eliminate the oil and gas lease application backlog for offers relating to BLM-managed lands early in FY 1983 and to reduce the application backlog for lands managed by other agencies by 50% by the end of the fiscal year. Any remaining backlogs on lands managed by other agencies will be eliminated by the end of FY 1984. This increase will also enable BLM to review an additional 2,000 applications for permits to drill and an additional 2,000 development plans. In FY 1982, BLM initiated a leasing program in the National Petroleum Reserve in Alaska. In FY 1983, plans are to extend oil and gas leasing to the entire state. We believe that these increased efforts will encourage actual exploration and development of oil and gas resources to meet national demand and strengthen the economy.

The recommended reduction of $2.1 million in the coal leasing program is associated with requirements to complete one fewer site-specific Environmental Impact Statement than was estimated for FY 1982 and a reduction in technical investigations on 2.2 million acres. BLM's commitment to meeting the established coal leasing schedule remains unaltered. We plan to hold two competitive lease sales in FY 1983 and intend to have all preference right lease applications processed by December of 1984.

In FY 1982 BLM adopted streamlined geothermal leasing procedures that should eliminate the current backlog of lease applications by the end of FY 1982. The FY 1983 request of $2,822,000, an increase of $550,000, will enable BLM to meet the projected postlease actions resulting from increased FY 1982 leasing as well as to establish a simultaneous geothermal leasing program.

Establishing procedures and guidelines for a permanent oil shale leasing program by early 1983 is another major BLM objective. The FY 1983 budget for oil shale leasing of $3,791,000, including an increase of $372,000, will provide for necessary planning and environmental analysis and the development of oil shale leasing regulations. Leasing under the new oil shale program regulations could take place in early 1984 after completion of land use planning. One to two additional prototype tracts may be leased in FY 1983.

Recent legislation has provided for the leasing of tar sands oil through combined hydrocarbon leases. There are an estimated 30 billion barrels of tar sand oil with a proven recoverable reserve estimated at 2 to 3 billion barrels, ninety percent of which is located on Federal lands. The main elements of the FY 1983 tar sands program are planning, environmental analysis, and issuance of regulations necessary for the development of a competitive tar sands leasing program and conversion of existing oil and gas leases in special tar sands areas. The FY 1983 budget request is $750,000, an increase of $528,000 over the base.

For offshore energy programs, we are requesting nearly $44 million, an increase of $4,050,000 over the FY 1983 base. This will enable BLM to meet the goals of the proposed leasing schedule originally announced by Secretary Watt in July of 1981, and just recently updated. The March 15 proposed schedule, if approved, will become effective in July 1982. The increase is necessary to accomplish the increased workload associated with an accelerated pace of leasing and to issue the additional leases expected because of additional acreage offered. The 1983 budget includes a $1.2 million increase for environmental studies.

For non-energy minerals programs, we are requesting about $10.2 million for FY 1983, including an increase of $450,000 to process additional material disposal requests and to review notices and plans of operations submitted to the Bureau under the surface management regulations.

Lands and Realty Management

The FY 1983 budget request of $35.6 million for the Lands and Realty Management program is up nearly $4.6 million from the 1983 base. This includes an increase of $3,250,000 to accelerate decision making on land use authorizations. Emphasis will be placed on land conveyances to the State of Alaska, adjudication of Alaska Native allotments and a reduction in lands case backlogs in states other than Alaska. Also, an increase of $1.7 million will be devoted to expediting energy related rights-of-way actions, particularly for roads to well sites and for natural gas pipelines.

Special emphasis will be placed on our efforts to make available parcels of Federally-owned land to meet expansion requirements of communities throughout the West. A year ago Secretary Watt invited the Western Governors to identify the needs of their states in this regard. They identified about 953,000 acres. In FY 1983 BLM will continue its efforts to convey these lands where appropriate through sales, exchanges, and Recreation and Public Purposes Act transfers.

There is a reduction of $400,000 in our withdrawal review program, which does not represent any deviation from our commitment to meet the 1991 deadline that Congress has mandated for completing withdrawal reviews. With the emphasis on energy exploration and development, it is essential that we conduct withdrawal review systematically and expeditiously to revoke unneeded withdrawals and to make lands available for multiple use purposes where appropriate. Reviews of BLM-administered withdrawals will be completed by 1983.

Renewable Resources Management

The FY 1983 request for renewable resources management is nearly $102.3 million, a reduction of $10.8 million from the FY 1983 base. This reduction reflects an affirmation of our policy to improve efficiency in government. Some of these renewable resource programs have grown rapidly in recent years without a complete sense of direction necessary to insure that the taxpayers' money is spent in a way that maximizes the public interest. Most of the program increases over the last few years have been tied to meeting both the court-mandated EIS schedules and severe on-the-ground problems. We intend to increase our scrutiny of these programs to insure that BLM actions provide the greatest return of benefits to the public.

We have introduced efficiencies into renewable resource management by streamlining the more intricate procedures that have evolved in the last few years and by decentralizing the decision-making to those managers closest to the problems on the ground. This shift of emphasis goes hand-in-hand with our recent reorganization of BLM field office staffing to place more BLM personnel in our district and area offices.

Looking more specifically at these programs, there is a $4.9 million reduction in the range management program, and there are related reductions of $2.3 million in the soil-water-air subactivity and $1.3 million in the wildlife habitat management subactivity. These result largely from reductions in the amount of intensive resource inventories and project development work. The inventories we have been conducting were highly intensive and focused on a single point in time. We are shifting emphasis from these one-shot efforts to a more effective program of baseline inventories backed up by an increase in multi-year monitoring and allotment supervision. The result will be a better means of determining where livestock and other range use adjustments are necessary and thus make more effective use of our rangeland management funding.

By continuing to implement a cost/benefit analysis of each project development proposal and adhering to approved land use plans, we intend to make the best use of all available dollars. These efforts, along with the increased level of monitoring, are leading to range improvement projects that are truly worth funding.

Within the total range management program, there is a $1.1 million reduction in the wild horse and burro program element. This reflects a completion of certain research projects and a reduction in the direct funding of the Adopt-a-Horse program as well as some reduction in gathering capability. The reduction of $1 million in the public domain forestry program will be met by targeting forest management activities to the most productive commercial forest lands.

In our recreation resources program, we are proceeding with wilderness studies for an eventual total of 24 million acres of Public Lands. Arriving at our wilderness recommendations will be expedited through use of a BLM minerals assessment program to add to our surface resource information. In line with FLPMA's directive, we are having mineral surveys performed by the Geological Survey and Bureau of Mines on those study areas found suitable for recommendation by the Secretary for wilderness designation. A reduction of $1.8 million is budgeted for this program. BLM will still be able to meet its wilderness study reporting deadline of FY 1987.

Fees for the use of developed recreation sites on the Public Lands are proposed to be raised as a result of the Administration's policy that those users who benefit from Federal expenditures should pay a portion of those costs. These fees will remain low even with the proposed increase, so that citizens will not be prevented access to the developed sites. The resulting collections, if appropriated by Congress in FY 1984, will be used to enhance the quality of our existing sites and insure the health and safety of the using public.

Planning

The FY 1983 budget also proposes a decrease of $1.5 million in funding for land use and resource management planning. While meeting all court-ordered and statutory requirements for plans, we believe we can achieve economies by streamlining requirements, deferring plan development where no significant issues exist, and using amendments to existing plans wherever possible.

Cadastral Survey

For Cadastral Survey, the FY 1983 budget request includes nearly $20.3 million, an increase of $800,000 over the base. Of this amount $9.9 million will be spent for surveys in Alaska. The Alaska survey program is directed primarily to meet the requirements of the Alaska Statehood Act, the Alaska Native Claims Settlement Act, and the Alaska Lands Act and a commitment to complete the required surveys in a reasonable period of time. Additional FY 1983 efforts in Alaska are directed to surveying Native allotment inholdings.

Nearly $10.4 million is requested for surveys in the other states which are necessary for energy development, resource management, and resolution of occupancy trespass cases.

Fire Management and Technical Services

Within these programs, we are requesting an increase of $1,950,000 in fire management to procure equipment to expand and improve our automatic lightning detection system and remote automatic weather station system, which are essential elements in reducing resource losses due to wildfires. We are also requesting an increase of $1.3 million to provide more adequate maintenance of Bureau-owned buildings, recreation facilities and roads. These expenditures will return benefits through the protection and prolonged life of the capital investments being maintained.

General Administration

The FY 1983 budget includes a separate activity for General Administration, as established by Congressional action on the FY 1982 MLR appropriation. The General Administration activity covers both the administrative and managerial direction portions of the previously used "Common Program Services" account and all of the costs of the Bureau's traditional general administration support functions. Consequently, the resultant FY 1982 and FY 1983 amounts for each program subactivity are directly comparable, since both years reflect only the direct costs of carrying out each program, without any portion of administration costs charged to them.

Our FY 1983 request for General Administration is $78,643,000, a decrease of $1,739,000 from the FY 1983 base. A decrease is proposed in certain administrative support costs and personnel to offset uncontrollable increases in Bureauwide fixed costs which are also budgeted under this activity, such as office space rental, communications, employee injury compensation and the like.

CONSTRUCTION, ACCESS, and LAND ACQUISITION

We have revised our approach to the construction and maintenance activities and land acquisition account and have proposed to transfer all facilities maintenance and engineering services costs to the MLR appropriation in FY 1983. In place of the previously separate "Acquisition, Construction and Maintenance" and "Land Acquisition" appropriations, we are requesting a single appropriation in FY 1983 for our capital improvement and land acquisition programs. This appropriation will provide for building construction, recreation construction, and transportation construction projects and for acquisition of both interests in land and easements for access. The FY 1983 request of $2,711,000 is a decrease of $2,928,000 from the comparable FY 1982 amount of $5,639,000. Of the amount requested for FY 1983, $468,000 is requested to be appropriated from the Land and Water Conservation Fund for land acquisition projects and acquisition management.

OREGON and CALIFORNIA GRANT LANDS

For FY 1983, we propose to continue the practice established last year of requesting a direct appropriation for the management of the highly productive O&C timber lands in western Oregon. The FY 1983 amount requested is $52,883,000, an increase of $95,000 over FY 1982 enacted.

This amount will provide a continuing program of timber sales, timber management, reforestation, protection, and other resource management actions as well as construction, easement acquisition and maintenance of facilities on the O&C Grant Lands and Coos Bay Wagon Road Lands of Western Oregon. Planned timber sales for FY 1983 are 1.1 billion board feet. Receipts from Western Oregon timber sales are estimated at $241.6 million in FY 1983.

PAYMENTS IN LIEU OF TAXES

The FY 1983 budget includes a request of $45 million for Payments in Lieu of Taxes. Proposed legislative changes in this program are being considered by the Department.

Other Accounts

Our requests for the "Range Improvements," "Service Charges, Deposits and Forfeitures" and "Trust Funds" appropriations are for such sums as are collected or deposited according to the provisions of law. We have estimated FY 1983 budget authority at $21.1 million for these accounts, a reduction of $1.7 million from the estimate for FY 1982, because of lower grazing fees for FY 1983.

Mr. Chairman, this concludes my opening statement. My associates and I are willing to answer your questions to the best of our ability or provide whatever additional information you need to assess our FY 1983 budget requests.

Mr. YATES. The request for supplemental appropriations may go into the record too.

[The information follows:]

Justification of Program and Performance

Activity: Firefighting and Rehabilitation

(Dollar amounts in thousands)

	1982 Presently Available		1982 Revised Estimate		1982 Proposed Supplemental	
	Perm. Posn.	Amount	Perm. Posn.	Amount	Perm. Posn.	Amount
Total Requirements	---	$4,560	---	$64,560	---	$60.000

Authorization: 43 U.S.C. 1731) Federal Land Policy and Management Act
P.L. 94-579 of 1976

16 U.S.C. 594 Timber Protection Act of 1922
P.L. 67-315

42 U.S.C. 1856) Reciprocal Fire Protection Agreement Act of 1955

Objectives: These funds are used for BLM emergency presuppression work during the fire season, for the actual suppression of range and forest fires starting on or threatening the Public Lands, and for subsequent emergency rehabilitation work in burned areas to reduce resource and economic losses.

Base Program: Total firefighting costs have averaged more than $47 million annually for the past five years; actual obligations in FY 1981 amounted to $58,546,000. The FY 1982 Appropriation Act (P.L. 97-100) provided a token appropriation of $3,984,000 for firefighting and $576,000 for fire rehabilitation.

Because of the emergency nature of wildfire suppression work, under the authority provided by the token appropriation and the General Provisions of the annual Interior Department Appropriation Act, the Bureau engages in emergency presuppression and fire suppression efforts each year and seeks a suplemental appropriation to cover the actual cost of current year fire fighting and rehabilitation requirements, plus the additional cost of unpredictable fires which occurred late in the 1981 season after the supplemental was provided. These costs were carried forward in FY 1982.

When vegetative cover is removed by wildfire, immediate rehabilitation action is required to prevent both the loss of thousands of cubic yards of soil by water or wind caused erosion and the permanent impairment of site productivity. Rapidly growing species of vegetation along with water control structures, such as brush dams or ditches, are immediately established in these areas to reduce further resource losses. With

Appropriation Committee approval, amounts necessary for such emergency rehabilitation in excess of the $576,000 basic appropriation are obligated each fiscal year. In FY 1981 obligations for fire rehabilitation totaled $949,042.

Need for Supplemental: During calendar year 1981, both the number of fires and acres burned were more than the Bureau's ten (10) year average. There were 2,870 fires and 1,157,975 acres burned in 1981, compared to the ten year average of 2,587 fires and 889,883 acres burned. Much of the acreage increase was due to the drought in the Great Basin area. The drought at lower elevations and carrying over fuels from the previous growing season allowed fires to spread to larger sizes. In addition, heavy lightning storms helped to increase the number of fires in late spring and summer.

	Last 10 year Average		Calendar Year 1981	
	No. of Fires	Acres Burned	No. of Fires	Acres Burned
Alaska	439	524,513	106	536,320
Lower 48	2,148	365,370	2,764	621,655

Annual firefighting costs are directly related to the occurrence and the severity of each fire, and thus cannot be predicted accurately. The number of fires, the size of each fire and the length of the fire season directly impact the annual funding required.

Firefighting obligations incurred from October 1, 1981 to February 28, 1982, were $23,227,640 ($22,467,452 for fighting and $760,188 for rehabilitation excluding the $23,800,000 of prior year obligations carried forward from FY 1981). This amount is partially offset by the FY 1982 appropriation of $4,560,000. Based on the five year average, spring and summer fire costs are estimated at $24,772,360.

An analysis of the amount needed for FY 1982 follows:

Fire obligations carried forward from FY 1981	$23,800,000	
Fire obligations incurred October 1, 1981 to February 28, 1982	23,227,640	
Estimated spring and summer fire costs	24,772,360	1/
Less amount appropriated	-4,560,000	
Less O&C payback	-5,000,000	
Total estimated obligations	62,240,000	
Estimated obligations carried forward to FY 1983	-2,240,000	
FY 1982 supplemental requested	$60,000,000	

1/ Based on an average of the last five years, as follows:

FY 1977....................................	$51,210,000	
FY 1978....................................	35,983,000	
FY 1979....................................	44,699,000	
FY 1980....................................	48,470,000	
FY 1981....................................	58,546,000	
Five Year Average..........................	47,782,000	
Rounded to.................................	48,000,000	
Fire Obligations 10/1/81 - 2/28/82.........	23,227,640	a/
Spring and Summer Fire Cost................	24,772,360	

a/ Excludes $23,800,000 in obligations brought forward from FY 1981.

Obligations during the fiscal year exceeding the token amount contained in the President's Budget make it necessary to borrow funds from other BLM accounts and other appropriations available to the Secretary of the Interior. Section 102 of the FY 1982 Interior Department Appropriations Act (P.L. 97-100) which provides that "The Secretary may authorize the expenditure or transfer of any appropriation in this title, in addition to the amounts included in the budget programs of the several agencies, for the suppression...of forest or range fires on or threatening lands under the jurisdiction of the Department of the Interior..." Section 102 further provides that "appropriations made in this title for fire suppression purposes shall be available for the payment of obligations incurred during the preceeding fiscal year, and for reimbusement to other Federal agencies..."

Object Classification Distribution

	Number of Workyears	Costs
Positions other than permanent	1,245	$16,000,000
Other personnel compensation	259	5,000,000
Special personnel services payments		3,000,000
Total personnel compensation		24,000,000
Civilian benefits		2,000,000
Travel and transportation of persons		900,000
Transportation of things		3,000,000
Standard level user charges		900,000
Communications, utilities and other rents		900,000
Printing and reproduction		50,000
Other services		20,000,000
Supplies and materials		8,000,000
Equipment		200,000
Insurance claims and indemnities		50,000
Total obligations		$60,000,000

HIGHLIGHTS OF BUDGET REQUEST

Mr. Yates. Mr. Carruthers, would you like to tell us the highlights of your 1983 request for appropriations and the 1982 request for supplemental funds?

Mr. Carruthers. Mr. Chairman, I thank you for the opportunity to visit with the House Committee on Appropriations. This is my first trip up here to visit with you. I appreciate it. I would only highlight two items from our testimony, combining my testimony with Mr. Burford's.

First, the 1983 budget request represents our continued emphasis on exploration and development of the Nation's energy and mineral resources. Most of the programs we have asked for increased funding in are in those areas, the Outer Continental Shelf, onshore oil and gas leasing, oil shale and tar sands programs. The 1983 budget request for these new initiatives and even for traditional programs also reflects our efforts to streamline and decentralize the Bureau of Land Management's operations.

We are committed, in the Department under Secretary Watt's leadership, to a management by objectives system. We have developed one in Land and Water Resources and in the BLM to attempt to gain better management of our programs there. We have attempted to return to a management mentality. Director Burford and myself have talked to BLM employees for some time. They seem to be anxious to get back to managing the public lands and to try to improve those resources that are held for all Americans.

We have streamlined a number of programs, coal leasing, rangeland management and planning, for example. The last comment I would like to make in summary is that Bob Burford is doing a super job as Director. He is communicating with our professionals. They want to be managers. I think the chemistry is right for us to manage the public lands even in the face of limited resources. Now that I have——

Mr. Yates. What does that mean?

Mr. Carruthers. Well, I think, in the past, the growth in resources for the Bureau has been somewhat greater than you see indicated in the 1983 budget request for operations.

Mr. Yates. What is your opinion? I see that you are a doctor, too. You belong to Sigma Phi and other educational institutions. How did you avoid the Department of Agriculture though? Your biography seems to indicate your specialty is in agriculture.

Mr. Carruthers. No, sir, most of my background is in economics. Agriculture, economics, natural resources. I spent one year in the Department of Agriculture as an aide to Secretary Earl Butz some years ago. It was his influence that inspired me to become active in the political affairs of my State, and as a result of that, I continue to practice economics and natural resources economics.

Mr. Yates. In your case, it is political economy then?

Mr. Carruthers. Well, yes, I think natural resources economics in New Mexico has a hint of politics.

Mr. Yates. It was political economy when I went to college.

Now, if I want to find out whether there is enough money in this budget to properly administer the Bureau of Land Management, should I ask you that question, Dr. Carruthers, or should I ask Mr. Burford that question?

Mr. **Carruthers**. I think you should ask Mr. Burford that question. My philosophy of management very simply is that Director Burford is the Administrator of the Bureau and I operate in the policy area. We are close associates, and he is well versed on his budget. And I am here to assist him in any way I can.

DIRECTOR'S HIGHLIGHTS OF BLM BUDGET

Mr. **Yates**. All right. Thank you. Mr. Burford, do you want to tell us what the future holds for you? Give us a recap of your first year in charge of BLM, and what you think will happen in the second year. And the third and fourth, if you can look that far into the future.

Mr. **Burford**. Well, I have never claimed to be crystal ball gazer, Mr. Yates. But I can tell you some of the things that have happened in the past year and some of the expectations I have for the future. I have entered the prepared statement.

Mr. **Yates**. That is already in the record, that is right.

Mr. **Burford**. Over the past, it hasn't been quite a year yet—I think I was confirmed as Director of the Bureau of Land Management in May of 1981—we have made some changes in the philosophy of management of the public lands. We have made some changes in the grazing policy, shifting from a one-time vegetative inventory to one of assessing ranges over a longer period of time with a monitoring system.

We have aggressively promoted leasing of lands for energy and minerals. We have seen the income of the United States Treasury increase because of some of the past leasing and some of the leasing that has taken place since we have been in office. We expect this to continue.

As you no doubt noticed in our estimates of income to the Treasury, we expect a dramatic increase in income from the Outer Continental Shelf leasing.

OCS LEASING RECEIPTS

Mr. **Yates**. Well, if the history of estimates in the past is any indication, you are not very accurate. As I remember, you are expecting $18 billion to come into the Treasury. How in the world are you ever going to get that much money?

Mr. **Burford**. I think there is one thing in there which may be a little misleading, which I think in the budget highlights shows two sales in fiscal year 1982. Most of the receipts fall into 1983. Those are the North Atlantic and Alaska sales. There are also a couple of very big Gulf of Mexico sales within 1983, and Gulf of Mexico sales have traditionally been high income producers. They have been bid high because of the high potential and the assessment of the geology in that area. Since there has been so much drilling, most oil companies feel they have a pretty good handle on what the potential is there. That is the reason we estimate that there will be about $18 billion from the Outer Continental Shelf sales.

I think if you look at the past 3 or 4 years on our estimates, we have been consistently low. I believe, and this can be confirmed or denied, that over the past 15 years our average of estimates, and admittedly, this is an estimate which can be changed by economic conditions, has been a little bit low compared to what we have actually received over the last 15 years.

Mr. PETTY. I believe it is within two percent on the average for the last 15 years.

Mr. YATES. Yes, but you have been on the high side.

Mr. BURFORD. Are we two percent on the high side?

Mr. PETTY. I think if you put it in the 15-year structure we have been on the high side, the last 3 to 4 years we have been under estimating receipts.

Mr. YATES. That is because the price of oil went up? Are you talking about bonuses?

Mr. PETTY. Yes, bonuses.

Mr. YATES. That depends on the price of oil, too. That is the reason your estimates were on the low side, the price went up after you made the estimates.

Here we have a Washington Post article that says: "But officials of three oil companies—Shell, Exxon and Union Texas petroleum, all said they found the projection optimistic; Robin Nanz of Shell said it was 'highly speculative'.

"The Petroleum Institute's Henderson said softness in the world's oil market would work against the OMB expectations." Costs are going up and oil revenues are going down. I think that would raise questions.

At any rate, I didn't mean to interrupt you, although I invariably do. I didn't mean to disrupt your train of thought. Go ahead.

BUDGET HIGHLIGHTS

Mr. BURFORD. Well, we have requested a budget of $1.25 billion which is an increase of $7.6 million as far as facilitating development of domestic energy resources, and these increases are targeted to onshore and offshore oil and gas, geothermal, oil shale and tar sands leasing.

We are requesting increases of $450,000 in the non-energy minerals program and $4.6 million in lands and realty management programs. We will continue to manage the renewable resources of the public lands in a manner which effectively considers, develops and utilizes these important timber, rangeland, watershed and recreational resources within the multiple use context.

This $1.256 billion is an increase of $117.2 million over the fiscal year 1982 appropriation. Of this, $756.5 million is estimated for payments to States and counties in the form of shared revenue, and $45 million is proposed for payments to counties in lieu of taxes.

These amounts make up about 64 percent of the total budget. The remaining $455 million of this request will finance the operation of BLM's land and resource management programs. This will support 10,368 FTE personnel which is a decrease of 280 FTE from the 1982 budgeted level.

In the management of lands and resources appropriation, we are requesting $373,527,000 for fiscal year 1983 which is an increase of

$18.2 million over fiscal year 1982 and a program increase of $1,748,000 over 1983 base.

Approximately $99 million is budgeted for energy and minerals management; $35.6 million for lands and realty management; nearly $102 million for renewable resources management; $20 million for planning and data management; $20.3 million for surveys; $13 million for resource protection and maintenance; and $78.6 million for general administration.

Construction, access and land acquisition is $2.7 million which is a decrease of $2.9 million from 1982 comparable amounts.

In O and C grant lands funds, we are requesting a direct appropriation of $52,883,000, which is an increase of $95,000 over 1982's enacted amounts. This completes my summary, and I think the people at the table have already been introduced.

PAYMENTS IN LIEU OF TAXES

Mr. YATES. They have. Well, the request for $45 million is not within the budget, but it still will be a requested appropriation when the legislation goes in. It is dependent upon passage of legislation. You are talking about PILT?

Mr. BURFORD. That is right, $45 million.

Mr. YATES. If that legislation isn't passed, you are going to come back and ask for that money in a supplemental as I remember Mr. Watt's testimony.

Mr. CARRUTHERS. I think that was correct, Mr. Chairman.

Mr. GORRELL. Mr. Chairman, the Secretary indicated a commitment to come back for PILT.

Mr. YATES. As I remember it he was for the program. Whether the program is passed or not.

Mr. GORRELL. That is up to you. We will propose.

SECRETARY'S ASSESSMENT OF THE PUBLIC LANDS

Mr. YATES. Thank you, Mr. Burford.

Now, I look at the Secretary's annual report. In the course of his letter to the President, he says this:

> As we took office in January 1981, there was too much air and water pollution, the national parks had been allowed to deteriorate, our wildlife ranges and refuges have been neglected.

Let's talk about our wildlife ranges for a minute. Where was the neglect? Would somebody like to answer? I am talking about wildlife ranges, not refuges. I am talking about the ranges; the public lands. I assume that is what the Secretary was talking about in his letter, wasn't it?

Mr. BURFORD. It was my assumption that the Secretary was talking about——

Mr. YATES. The refuges?

Mr. BURFORD. Refuges. He has made no reference to me in the context of wildlife ranges.

Mr. YATES. If that is true, there is no reference in the Secretary's letter to the President as to the ranges, then, is there, or to any public lands? Would the Secretary have written to the President without suggesting anything about the public land?

Mr. Carruthers. Mr. Chairman, if I might, the Secretary does indicate in here our answers to energy and mineral resources, which are part of the public lands, and wilderness lands within the study areas are part of the public lands.

Some of the water concerns are associated with the public lands.

Mr. Yates. Yes, but he isn't talking about their condition, is he?

Mr. Carruthers. He's talking about multiple use lands. Under the statement, where it says wildlife ranges and refuges have been neglected and multiple use lands have not been managed properly, there is a reference to the public lands, I would submit, Mr. Chairman.

We are careless from time——

CONDITION OF PUBLIC LANDS

Mr. Yates. Our multiple use lands have not been managed. Is that what you are talking about?

Mr. Carruthers. Yes, sir.

Mr. Yates. That is the public lands?

Mr. Carruthers. That is a reference to the public lands, I am sure.

Mr. Yates. I see. ". . . had not been managed properly for the taxpayers and consumers," what does that mean then? I asked the Secretary about it and he suggested I wait until the people from the BLM come in.

What is the condition of it?

Mr. Burford. What is the condition of the public lands?

Mr. Yates. Yes.

Mr. Burford. In my assessment of the public lands since I have been in this office, I think that the public lands are improving. Some of them have improved dramatically over the last 20 or 30 years, and in some areas, through proper management and range improvements, carrying capacity for wildlife and livestock on the public lands has been increased as much as 180 percent.

In some other areas of less rainfall, the increase in productivity has not been nearly as dramatic, but for those familiar with desert ranges, we know that improvement comes very slowly.

Mr. Yates. Even more slowly when your budget is cut, doesn't it, which is what is happening this year.

Mr. Burford. I think that perhaps in some of the areas where the cost-benefit ratio is favorable to plant the seeds, which we know will come up, there might be some places where improvement would slow down under budget cuts.

In many of the public lands of the West, planning itself is not an answer to improvement; direct management is an answer. We think we have instituted a program of direct range management which will show an increase in forage over the next 20 to 30 years. I think that there has been a dramatic improvement in the public lands in my lifetime, and within my memory. I think that the possibility for improvement exists and that there can be an increase of as much as, only an estimate, 200 percent in the carrying capacity of many of the ranges over the next 30 or 40 years. But it will be slow.

Mr. Yates. Tell us how you propose to do that.

Mr. Burford. We will correct management of livestock and management of wildlife resources—the correct stocking rates. And we intend to institute a monitoring system which will allow Bureau personnel to determine whether a range is increasing in productivity or decreasing in productivity, to put in new management systems, or change the management system that is there.

If the management system which is in place is leading to improved ranges, then we think it should be left that way. If it is not leading to improved ranges, we think it should be changed.

Mr. Carruthers. Mr. Chairman, if I might add some specifics, the Director has issued a memorandum on range improvement funds which directed that more of those funds be placed directly on the ground, and less in administration. We have streamlined the process to incorporate environmental planning, we are attempting to make that a dynamic process. We want to consider the conflicts of natural resource use using a new planning process. The new selective management program identifies those lands where, if we do invest public resources in range improvements, we will get the biggest bang for the buck. And the Director has also indicated we want to share the cost of management with those sectors that are utilizing the public resources, so that we don't have to expend so much of the Federal dollars in trying to upgrade the condition of the range.

Mr. Yates. How do you know the condition of the range? You came in last year, and you really didn't know the condition. I asked you the question, and the last report you had was 1975. Of course, you have so many acres, how many are there in the public lands now, 350 million?

Mr. Carruthers. Yes, in the BLM.

INFORMATION ON RANGE CONDITION

Mr. Yates. Last year the answer was, according to the 1975 range condition report prepared for the Senate Committee on Appropriations, 78 percent of the rangelands were in fair or poor condition. Is that still the latest available on range conditions? Do you have any other information that would change that?

Mr. Carruthers. Mr. Chairman, as you are well aware, we are under court order to do envrionmental impact statements on the grazing lands across the country. That program is progressing. We are attempting to change our EIS process in a way which will incorporate it with our planning system. On a district by district basis, we are coming up with the kinds of judgments you are asking for, but I am not sure we can provide you today, Mr. Chairman, with systemwide estimates.

The BLM has been very much involved in the EIS process as a result of this court ruling for a period of time. We have not completed that process and do not intend to until when, Bob?

Mr. Burford. Late 1988.

Mr. Carruthers. Until such time as we have the environmental impact statement and monitoring systems in place, I do not think we can honestly answer your question.

Mr. Yates. Well, I do not think you can either. I think it is going to be delayed if you keep cutting the budget, isn't it?

Mr. **Carruthers**. Sir, we are trying to streamline the process.

Mr. **Yates**. I love the phrase "streamline the process". When the last BLM director was in here last year, and I reviewed the cuts in appropriations with him, I said, "How are you going to take care of your lands if your budget is being cut?" He said, "We are going to have to streamline." I said, "All right, presuming you streamline it, will you be able to do it?" He said, "Well, we are going to have to be smarter." I suppose that is the rationalization for not having enough money to adequately do the job.

SELECTIVE RANGE MANAGEMENT

Mr. **Carruthers**. Well, I would like to think for example, that the selective management program is being smarter. We have taken the lands, or will take the lands, and categorize them instead of trying to treat all the public domain as being receptive to throwing money at them. We would take some lands that are well managed now by the people who are using them, and set those aside in a maintenance category.

And we will continue to monitor those lands to see that their productivity is not being diminished.

Mr. **Yates**. How much of the lands would that encompass?

Mr. **Carruthers**. We have not categorized those lands yet to my knowledge.

Mr. **Burford**. No, we have not.

Mr. **Vail**. No, but we have estimated about 32 to 35 percent would fall into that.

Mr. **Yates**. 32 to 35 percent of what?

Mr. **Vail**. Of the total lands managed under grazing.

Mr. **Yates**. Of 350 million?

Mr. **Vail**. Yes, sir, that is correct.

Mr. **Yates**. You are going to do that to over 100 million acres?

Mr. **Vail**. We estimate approximately that much will fall under this category of selective management.

Mr. **Yates**. Do you have enough people and enough money to do it?

Mr. **Carruthers**. A good share of this information is available from the planning process, as I understand the process.

Mr. **Vail**. Yes.

Mr. **Carruthers**. It is not something new we have to strike out to do. But there is a category of land, the improvement category lands or those where we think we need to invest a lot of dollars. We will focus our investment there. Then the custodial lands are those lands deemed by the professionals as not being capable of producing more, even if you put more money into them.

I think that shows smart economics, Mr. Chairman, moving in that direction in the management of public lands.

Mr. **Yates**. Mr. Burford.

Mr. **Burford**. Grazing use is a multiple use on about 170 million acres.

Mr. **Yates**. Grazing is a multiple use on 170 million acres. We had asked BLM to give us an inventory of the grazing land by quality. Do we have that?

Mr. **Burford**. We will have it after we get through this classification. I am not sure we have it at the present time.

Mr. **Yates**. When are you going to have it?

Mr. **Vail**. The classification information will be available when the EIS's are completed in 1988.

Mr. **Yates**. That is for a third of the land.

Mr. **Vail**. Well, this classification will be on all of that land.

Mr. **Burford**. But grazing is on 170 million?

Mr. **Vail**. Grazing is one of the three classifications.

Mr. **Yates**. Grazing is on 170 million acres?

Mr. **Burford**. Yes, sir, that's right.

GRAZING FEES

Mr. **Yates**. While we are on grazing, let me ask you a question. Should the grazing fees be reduced by 45 cents per AUM? That is statutory, I know. But should it be?

Mr. **Burford**. According to the statute——

Mr. **Yates**. Well, suppose you were—let me ask you a question, Mr. Burford. You have been a private landowner in your day, haven't you? You are a private landowner now and you have grazing lands?

Mr. **Burford**. Yes.

Mr. **Yates**. Are you going to reduce the fees per AUM on your grazing lands by 45 cents?

Mr. **Burford**. I would have to look at it.

Mr. **Yates**. But you are not going to reduce them now, are you? If you have good lands, if you have land that you have contracts for, you are not going to reduce that grazing fee now, are you? Have you reduced your grazing fee on the lands you own?

Mr. **Burford**. The land that I own is all leased out on a long-term set fee.

Mr. **Yates**. Okay. So, you are not going to reduce it then?

Mr. **Burford**. There is no reduction on that lease since it was figured on an average price. On land which is coming up for lease today by those people who normally lease on a year-to-year basis, the information that I have is that, at the present time, lease rates in Colorado have dropped from about $12 to around $6, or about a 50 percent drop.

Mr. **Yates**. Really?

Mr. **Burford**. Yes, sir. The cattle market is, I would say, comparable to the car market at the present time.

Mr. **Yates**. I do not know anything about land leasing for grazing purposes. Is credit required there too?

Mr. **Burford**. Well, there will be in some instances. As far as the lease is concerned?

Mr. **Yates**. Well, I do not know. You compared it to the car market. I do not know whether or not the economics are comparable.

Mr. **Burford**. Yes. The livestock business is a highly capital intensive business; much credit is involved in the livestock business. And with interest rates of 18, 20, 21 percent——

Mr. **Yates**. That is no real incentive to go into it, is it?

Mr. **Burford**. No, sir, it is not.

Mr. YATES. Grazing rates are coming down?

FEES FOR PRIVATE GRAZING VS. PUBLIC LAND

Mr. BURFORD. Yes, sir, on private lands, grazing rates are coming down.

Mr. YATES. Therefore, the cut in fees on Government land is in accord with what is happening on private lands?

Mr. BURFORD. Well, I would say it is similar.

Mr. YATES. Wait a minute. If it goes down from $12, was it $12 in 1981?

Mr. BURFORD. Well, that is a figure I picked out of the air.

Mr. YATES. What is a comparable leasing rate for private lands?

Mr. BURFORD. It depends.

Mr. YATES. It depends on the land, of course. I mean for comparable grazing quality land, the best private land, you were getting $12 per AUM?

Mr. BURFORD. That depends on the range owner. If he furnishes all the labor and the salt and the care of the cattle, and in some cases the veterinarian and so forth, it can go up as high as $12 or as low as $2 to $3 to $4.

Mr. CARRUTHERS. In 1981, the 11 States private grazing land lease rate was $11.83.

Mr. YATES. What was the Government?

Mr. CARRUTHERS. The Government rate in 1981 should have been $2.51.

Mr. YATES. $2.51, so, it is four to one then, isn't it?

Mr. CARRUTHERS. Approximately. It's $2.31, I am sorry.

Mr. YATES. Why shouldn't the Government land lease for as much as private land?

Mr. CARRUTHERS. For the productivity of the resource, that is perhaps true.

Mr. YATES. Assuming equal land.

Mr. CARRUTHERS. Ownership of the lands, whether it be public or private, has some effect on the value of the land when it is rented.

Mr. YATES. Why, if the land is the same, what difference does the ownership make?

Mr. CARRUTHERS. Neither the private rate nor the public rate is truly based upon productivity. Both have other factors involved.

Mr. YATES. I am assuming equal factors.

Mr. CARRUTHERS. Well, a true index, Mr. Chairman, would charge just for the productivity of the grasslands.

Mr. YATES. It would be the same then. If a rancher was interested in leasing some land, wouldn't it be best to look at both parcels and decide which was the best land. Wouldn't the rancher select the best land?

Mr. CARRUTHERS. The markets are different. The land tenure arrangements that can be made in either of those markets are considerably different. The public land market, the right for use of the public land is usually a longer-term permit issued to grazers than has been the case with the private market.

Mr. YATES. You know, I have been in Congress a long time. Everybody keeps telling me that we ought to try, to the extent possible, to gear our economic operations to private enterprise. Why shouldn't you do that in grazing? If the private landowners engage in short leases, why shouldn't the Government do the same?

Mr. CARRUTHERS. We are not averse to moving toward the market system in many of our resource programs, as you will note in the Bureau of Land Management right now. We are currently studying the grazing fee formula as Congress asked us to.

Mr. YATES. I know. When you are through studying it, you will make recommendations for higher grazing fees, and the Congress won't pass it, right?

Mr. CARRUTHERS. Well, I do not know what the recommendations will be but they should have——

Mr. YATES. That is what happened last time.

Mr. CARRUTHERS. They should have a market orientation if this Administration holds true to form.

Mr. YATES. Well, that is what happened the last time. The last time the statute came up, it was at a time when private grazing fees were high. But Congress wouldn't allow public lands to be leased for comparable fees. I didn't vote for that incidentally. I voted to compare them with private rates.

I do not think the cattleraisers would want that. I do not think they would want a comparable base with private ownership, would they?

MULTIPLE USE OF PUBLIC LANDS

Mr. CARRUTHERS. There are additional factors, Mr. Chairman, that would cause me to conclude that you would have difficulty in matching them up one-to-one.

Mr. YATES. Tell me what they are. Educate me.

Mr. CARRUTHERS. The public lands are multiple use lands and we cannot prevent other uses from occurring on the public lands. What you might want to add is that some other people ought to be paying fees for using the public lands that aren't now. Those uses are subsidized, right now, by tax dollars, as opposed to a private landowner who can restrict use.

On private land, you can keep people from drilling oil wells. You can keep recreationists from coming on. You can keep it from being a wilderness area on private lands. You can't on public lands. There are other users with other interests and they somehow have to be paying for the use of the public lands. Currently, that use may be reflected strictly in tax dollars because we are protecting these lands for multiple use. Well, you cannot charge, then, the same rate for private land that is managed in a different fashion than are public lands.

Mr. YATES. Well, doctor, if you were arranging it, would you eliminate the multiple use aspect?

Mr. CARRUTHERS. No, sir.

Mr. YATES. You would not?

Mr. CARRUTHERS. No, sir. I like multiple use of public lands. I think they were intended to be that way. I think it is very useful for us to maintain some public lands under multiple use for all Americans.

Mr. YATES. Okay. So, do you conclude from your answer, then, that you can't obtain as much in fees from public lands as from private lands?

Mr. CARRUTHERS. I would conclude, sir, that we would have difficulty doing that. I would also conclude that the market forces could be more persuasive than determination of a public leasing formula. As you indicate, I am not sure that politics will permit that to occur.

Mr. YATES. Do you want to ask a couple questions at this point?

Mr. AUCOIN. I have no questions, Mr. Chairman.

Mr. YATES. Will you excuse me for just a second.

[Brief pause.]

Mr. YATES. All right. Does your answer mean that the grazing fees the Government has been charging for its multiple use lands are a fair picture of what the market is?

Mr. CARRUTHERS. No, sir, I wouldn't make that judgment without studying the fees over a period of time. I am not a student of the formula. I am vaguely familiar with it. I have it in front of me. It takes into consideration some of the indices of inflation and value; that speaks well of it, but I couldn't make the judgment you are asking based on my knowledge of the formula.

PRICE SETTING FOR PUBLIC LANDS USES

Mr. YATES. The impression I have right now is that there is no way you can fix a fair price for grazing for a multiple use land. Isn't that what you are saying?

Mr. CARRUTHERS. No.

Mr. YATES. How do you do it? You can compare it to private industry.

Mr. CARRUTHERS. Yes, sir, I am going to agree with your statement because you can't capture costs from all the users of public lands. If you could do that, I would then say to you, yes, we can charge a fair value for all public lands. The control factor in private versus public lands creates a different economic environment. The distance to water, as the Director said, is a factor. Oftentimes the private lands have a much better water source. These are the lands people wanted early on, so they became private.

We are talking about public lands where other resources cost more to obtain. Even cranking all of those cost considerations in, we, in the Bureau of Land Management, still believe that other people, any person who wants to just walk across the public lands to enjoy the great out-of-doors, ought to be allowed to do that.

You can restrict them from private lands. We would have to capture them and charge them to let them walk across the public lands to have a perfect market. That is impossible. We can't consider ourselves doing that.

So, there is a fee that is built into the price of private lands that includes the fact that the real estate can be controlled more strongly than we can do in the public lands. I think that is as it should be, Mr. Chairman.

Mr. YATES. In other words, we are lucky to get the grazing fees we are getting. Those who are lucky enough to get those leases are very fortunate indeed, aren't they?

Mr. **Carruthers**. Yes, sir. I would agree with your second statement. I am not sure of the first statement.

Mr. **Yates**. Suppose you were to start from scratch. Shouldn't those leases be made with those people willing to pay the most?

Mr. **Carruthers**. There are a couple of examples we do give, such as the McGregor Range in New Mexico, my home State. There is a bidding process but the lease life is much shorter, a year-to-year basis.

Mr. **Yates**. What is your feeling about that, should you do it for all the lands?

Mr. **Carruthers**. It would complicate the structure of the range economy considerably if you went year-to-year leasing with all public lands, because the life cycle of the livestock operation is so long that I think it would create a chaotic situation.

ASSET MANAGEMENT PROGRAM

Mr. **Yates**. Why is it all right in New Mexico, but would cause chaos elsewhere?

Mr. **Carruthers**. Because the case I am referring to is a very small piece of land and is supplemental to other operations. As you know, Mr. Chairman, the President has indicated that some of these lands may be available for sale under the asset management program and that perhaps the best resolution to it is to offer some of the public lands for sale.

Mr. **Yates**. I was not aware the President was planning to sell some of the public lands. I knew he was thinking of declaring them surplus. Do you have the President's statement on this?

Mr. **Carruthers**. No, sir, I don't have it with me.

Mr. **Yates**. Has he issued a statement of purpose or policy in this regard?

Mr. **Vail**. He has issued an Executive Order.

Mr. **Yates**. What does the Executive Order say? Does anybody have a copy?

Mr. **Carruthers**. He is setting up a property review board to review all Federal property holdings. His initial focus will be with the so-called surplus properties. But the Bureau of Land Management, for some time, has sold public lands under certain conditions, and lands have been for sale.

Mr. **Yates**. I haven't seen the Executive order. What is proposed?

Mr. **Carruthers**. It is signed, Mr. Chairman. He proposes a property review board which will look at surplus lands in particular. For example, the Bureau of Land Management in Las Vegas, Nevada, has only recently offered public lands for sale, which is permitted under the Federal Land Policy and Management Act. All I am suggesting to you, Mr. Chairman, is it might be possible.

Mr. **Yates**. That is the Santini legislation?

Mr. **Burford**. Yes, sir.

Mr. **Yates**. Well, that goes into the purchase of land in the Tahoe Basin; it doesn't come to the Treasury?

Mr. **Burford**. No, sir.

Mr. **Yates**. That is a particular trust, really. It is in the nature of a trust.

Mr. **Burford**. Yes, sir.

Mr. **Yates**. That is not what this Executive order refers to.

Mr. **Burford**. No, sir.

Mr. **Yates**. What does this Executive order refer to?

Mr. **Burford**. Here is a copy of the Executive order.

Mr. **Yates**. That may go into the record at this point.

[The Executive order follows:]

Federal Register
Vol. 47, No. 40
Monday, March 1, 1982

Presidential Documents

Title 3—

The President

Executive Order 12348 of February 25, 1982

Federal Real Property

By virtue of the authority vested in me as President by the Constitution and statutes of the United States of America, including Section 205(a) of the Federal Property and Administrative Services Act of 1949 (40 U.S.C. 486(a)), in order to improve management of Federal real property, it is hereby ordered as follows:

Section 1. (a) There is hereby established a Property Review Board.

(b) The members of the Board shall be the Counsellor to the President; Director, Office of Management and Budget; Chairman, Council of Economic Advisers; Assistant to the President for Policy Development; Chief of Staff and Assistant to the President; Assistant to the President for National Security Affairs; and such other officers or employees of the Executive branch as the President may from time to time designate. One of the members of the Board shall be designated by the President as Chairman.

(c) Staff, including an Executive Director, and other administrative support shall be provided from resources available to the President.

Sec. 2. The Board shall perform such functions as may be directed by the President, including the following:

(a) develop and review Federal real property acquisition, utilization, and disposal policies with respect to their relationship to other Federal policies;

(b) advise the Administrator of General Services with respect to such standards and procedures for executive agencies that are necessary to ensure that real property holdings no longer essential to their activities and responsibilities are promptly identified and released for appropriate disposition;

(c) review and examine prior disposals of surplus property for public benefit discount conveyances to ensure that the property is being used and maintained for the purpose for which it was conveyed;

(d) receive the surveys and reports made by or to the Administrator of General Services pursuant to Sections 3 and 4 of this Order as well as other reports on Federal real property that are requested by the Board, with particular attention to resolution of conflicting claims on, and alternate uses for, any property described in those reports, consistent with laws governing Federal real property;

(e) provide guidance to the Administrator of General Services in accord with Section 6 of this Order;

(f) establish for each Executive agency annually the target amount of its real property holdings to be identified as excess; and

(g) submit such recommendations and reports to the President as may be appropriate.

Sec. 3. (a) All Executive agencies shall periodically review their real property holdings and conduct surveys of such property in accordance with standards and procedures determined by the Administrator of General Services pursuant to Section 206 of the Federal Property and Administrative Services Act of 1949, as amended (40 U.S.C. 487), and this Order.

(b) The head of each Executive agency, within 60 days of the date of this Order, shall report to the Administrator of General Services and the Board the agency's real property holdings which, in his judgment, are not utilized, are underutilized, or are not being put to optimum use.

(c) The head of each Executive agency shall identify, and report to the Board, all those properties which can be considered for disposition in response to the targets established by the Board in subsection 2(f) of this Order.

Sec. 4. The Administrator of General Services in consultation with the Board shall issue standards and procedures, conduct surveys, and cause surveys to be conducted, to ensure that the real property holdings of Executive agencies shall continually be evaluated with special emphasis on the identification of properties that are not utilized, are underutilized, or are not being put to optimum use. The Administrator shall consult with the Board and appropriate Executive agencies in order to (a) identify real property that is excess or surplus to the needs of the Executive agencies, and (b) make such real property available for its most beneficial use under the various laws of the United States affecting such property.

Sec. 5. The Administrator of General Services shall report to the Board with respect to any property or portion thereof which has not been reported excess to the requirements of the holding agency and which, in the judgment of the Administrator, is not utilized, is underutilized, or is not being put to optimum use, and which he recommends should be reported as excess property.

Sec. 6. Before the Administrator of General Services assigns or conveys property for public benefit discount conveyances, he shall first consult with the Board and consider such guidance as it may provide.

Sec. 7. The Administrator of General Services shall, to the extent permitted by law, provide necessary advice and assistance to the Board to accomplish the objectives of this Order.

Sec. 8. Executive Order No. 11954, as amended, is revoked.

Ronald Reagan

THE WHITE HOUSE,
February 25, 1982.

Mr. YATES. The Washington Post says: "White House is expected to select a panel to speed up the disposal of Federal property not used or needed." Have they set up the panel?

Mr. CARRUTHERS. I believe it has been designated, Mr. Chairman. I can't give you the names though.

Mr. YATES. The President has appointed people to the panel?

Mr. CARRUTHERS. I believe he has.

Mr. YATES. The article continues: "The move to create a real property review board as outlined in the 1983 budget is part of the Administration plan to sell off Federal property as a way of raising more than $4 billion in new revenues by fiscal year 1984." Correct me if what I read isn't correct. "Under the President's proposals the Government no longer would donate Federal land and buildings to State and local governments except for use as correctional facilities.

"That exception was made according to the budget because of the President's strong commitment to helping State and local governments upgrade the system. No longer would the Federal Government donate land to colleges and non-profit groups or offer it at discount prices.

"In addition, Federal Agencies would no longer be able to buy surplus property of other Agencies. Instead, the Agencies would have to pay full price to improve asset management and expose acquisitions to budgetary review. It would be the primary job of the new real property review board to set policy on property disposition issues, and to arbitrate disputes.

"Since January a task force headed by Darrell M. Trent, Deputy Secretary of Transportation, has been preparing a formal plan for President Reagan. Trent, Executive Director of a real property review board created during the Nixon Administration, then allowed to lapse, presented a plan to the White House last week. The change in policy for donating Government property is expected to draw criticism from groups that have benefited in the past as well as some Members of Congress."

I would think that the local communities would object, wouldn't they? Under this proposal, they would have to compete on the same basis as private people wouldn't they?

Mr. CARRUTHERS. Under that proposal, yes, sir, for certain cases I would imagine that local communities would object.

Mr. YATES. For example, the Government donated the lighthouse in St. Mary's County, Maryland, to the State for use as a park. Land in Crisfield, Maryland, has been set aside for a Coast Guard Family Housing area to the local school system. Part of the Manassas Air Force Station in Virginia to the Prince William County School System.

Those type of land transfers would not take place under the President's new proposal, would they? They would have to buy those lands on the same basis as, and in competition with, outside bidders.

Mr. CARRUTHERS. I think that is a decision the property review board has to make.

Mr. YATES. They haven't yet issued their regulations, have they?

Mr. CARRUTHERS. No, sir.

Mr. YATES. So, we are still waiting for their decisions?

Mr. CARRUTHERS. Yes, sir.

Mr. YATES. All right.

Mr. CARRUTHERS. On page 256 of the fiscal year 1983 Major Themes and Additional Budget Details document, it says that the Administration proposes to eliminate all discounted transfers to other Federal agencies and no-cost conveyances to State and local governments.

I am not familiar with the rules and regulations for the disposition of these lands, however, in the past the Bureau of Land Management has made available certain public lands for sale. It does bring the private sector into play, be they earmarked lands as in the Las Vegas case, or other lands in the BLM system. That perhaps is the best way to identify what the real private market value is of lands. In the asset management program, as I understand it, we will focus on those lands that are near communities and on scattered public lands that are difficult to manage and are not receiving proper treatment.

However, when they do go up for sale we will get some indication, if they are scattered grasslands, for example, we will be able to determine if there is a market value for that land.

Mr. YATES. Is there a prescriptive right of the public to use those lands after the sale? They have been using them for so many generations?

Mr. CARRUTHERS. Sir, I can't answer that question. I just don't know the answer to that.

PROGRAM BALANCE

Mr. YATES. It's kind of interesting to think about, isn't it? You are increasing the scope of energy and minerals management. You are adding $10.2 million there and you are balancing that addition by taking $10.9 million away from renewable resources management programs, and multiple use planning. That is correct, isn't it?

Mr. BURFORD. That is correct.

Mr. YATES. Now you are also going to trade your personnel. You are going to have an additional 195 full-time equivalents for energy and minerals management, and you are going to eliminate 255 full-time equivalents for renewable resources management and planning, right?

Mr. BURFORD. That is onshore and offshore.

Mr. YATES. I suppose. That is correct, isn't it?

Mr. BURFORD. Yes, sir.

Mr. YATES. What do you do about the provisions of the law, FLPMA, which requires multiple use, sustained yield management—eliminating so many people, cutting back as you are?

Mr. BURFORD. Some of the savings can be accomplished by the new grazing system. We also think there will be some savings accomplished by encouraging private investment. I would point out—did you have a question, sir?

Mr. YATES. No, go ahead, Mr. Burford.

Mr. BURFORD. The total in renewable resources management will still be $154 million and energy and minerals management is about $99 million.

Mr. YATES. Your budget justification on page BLM-23 indicates that instead of having 217 people for forest management, you will have 172 people. Instead of having 1,098 for range management you are going to have 1,028. Instead of having 340 for soil, water and air management, you are going to have 295. Instead of having 376 for wildlife habitat management, you are going to have 346. Instead of having 453 for recreation management you will have 448. For fire management you go from 273 to 278. The total for renewable resource management goes down from 2,757 to 2,567 in terms of people.

Mr. BURFORD. Yes. We feel with the President's emphasis on energy and minerals, that this is a correct shift. In dollars, the energy and minerals management program is about $99 million. Renewable resources management, including O&C lands, is around $154 million.

Mr. YATES. What about resource protection?

Mr. BURFORD. We feel we are answering the mandate of FLPMA in protecting resources under this budget.

Mr. YATES. That is what was said last year with that number of people. Was that number cut in last year's budget, too, from 1981 to 1982? Last year the Congress thought that you ought to spend more on resource management.

Let's look at one of the implications of the cutback. GAO says in a report dated March 10, 1982—that is fairly recently, isn't it?

Mr. BURFORD. Yes, sir.

Mr. YATES. Because of budget cuts at the Bureau, only about 40 percent of the crimes on public lands it hears about can be investigated."

Mr. PETTY. Mr. Chairman, I would like to respond to that if I might.

Mr. YATES. Please do.

Mr. PETTY. Unfortunately, that report does not come up to normal GAO standards for accuracy.

Mr. YATES. I think GAO feels the BLM isn't coming up to normal standards.

Mr. PETTY. We first got an appropriation for law enforcement in 1978, $772,000; 1979, $871,000; 1980, $923,000; and 1981, $1.3 million.

Mr. YATES. Well, the committee gave you all this money because the committee listened to your story and said, We want to help you.

Mr. PETTY. At no time has the budget been cut. Yet, GAO says, "as a result of budget cuts".

Mr. YATES. They are talking about last year and this year?

Mr. PETTY. From 1981 to 1982, the amount went from $1.3 million to $1.5 million.

Mr. YATES. Are you trying to tell the committee that you have adequate personnel and funds to take care of this problem?

Mr. PETTY. I am telling the committee, sir, that the budget was not reduced.

Mr. YATES. It was not reduced this year?

Mr. PETTY. It has never been reduced in law enforcement.

Mr. YATES. And it won't be reduced in law enforcement this year?

Mr. **Petty**. We are proposing in 1983, a further increase.

Mr. **Yates**. Good enough.

Mr. **Petty**. GAO was incorrect in referring to a decrease.

Mr. **Yates**. Good enough. Have you said that to GAO?

Mr. **Petty**. I certainly intend to. We have not responded to that report yet.

Mr. **Yates**. The GAO report refers to the California State office, Oregon State office, Medford District office, Reading District office, and the Susanville District office. You mean they were just speculating?

Mr. **Petty**. The budgets for those offices have also shown an increase.

Mr. **Yates**. Why didn't you tell them that?

Mr. **Petty**. They didn't ask.

Mr. **Yates**. You mean they just checked with those offices, and those managers—wait a minute. Here is what they say. "In California and Oregon, as elsewhere, the Federal land management agencies' ability to exercise law enforcement powers may be constrained by the jurisdictional status under which the Federal Government holds the particular land area. Federal lands even within the control of a single agency may be held in any one of three different jurisdictional categories.

"In California and Oregon, illegal and unauthorized activities are having a substantial effect on resource utilization. Because of this effect, Federal land management agencies may prescribe and enforce rules controlling those activities regardless of the jurisdictional status of the land area in question, so long as the Federal Government holds minimal proprietary jurisdiction.

"All three agencies have, at a minimum, the power to promulgate and enforce, through arrest and citation powers." Let me ask a question. You point out that the committee has given you additional money every year, but that does not answer the question, Has the money you have received been adequate to take care of illegal activities on the public lands?

Mr. **Petty**. Mr. Chairman, I would have to say that the money has been adequate to build a law enforcement program, and we are building one. It is a new program. I would personally not like to see us trying to establish a great big program at any one given time. Our law enforcement program has done very well.

TRESPASS

Mr. **Yates**. What about trespass, is that within the scope of illegal activities?

Mr. **Petty**. Yes, sir, it certainly is. The trespass has been around as long as the Bureau has been around, long before we had a law enforcement program.

Mr. **Yates**. I know. You often don't know where the boundaries are, so, you may have trespassers.

Mr. **Petty**. But resource personnel have, in the past and may continue to do a lot of work in trespass. That is not to say we don't have a trespass problem. We most certainly do.

Mr. **Yates**. Here is a paragraph that appears in appendix 4 of the report. "Grazing trespass appears to be economically advantageous to the violator, since trespass fines usually do not equal the cost of leasing commercial pasture." Do you impose the fines or does the court impose the fines?

Mr. VAIL. We do.

Mr. BURFORD. We impose the fines.

Mr. YATES. Why don't you make the fines adequate so they don't do it any more?

Mr. BURFORD. We have had a case in California where there have been repeated violations that caused us to revoke the permits, and that man will not have the use of the permits. It recently came out of Circuit Court and we have the case against the same repeated violator in Nevada.

Mr. YATES. What was the nature of the trespass with regard to Federal permits?

Mr. BURFORD. He had more cattle on the land at times when he was not authorized to be on there.

Mr. YATES. That is not trespass, is it?

Mr. BURFORD. Yes, sir, that is unauthorized use.

Mr. CARRUTHERS. He is talking about the time when someone on private lands goes onto BLM land.

Mr. YATES. Those are trespass too, are they not?

Mr. BURFORD. If they don't have a permit for the period of time that the cattle are out there that is trespass, and the gentleman in question has been a repeated violator.

Mr. YATES. How much did you fine him? You revoked his permit, but did you fine him?

Mr. BURFORD. Yes, there was a fine.

Mr. VAIL. Through the years he has paid significant grazing trespass fees but that didn't deter him. Then they went to a bond. That didn't deter him. Finally we went to the judge and they denied his permit to use public lands, period.

Mr. YATES. Do you have the right to revoke a permit?

Mr. VAIL. Yes, sir.

Mr. YATES. Of course, it is not your fault. If this has been occurring over the years, I wonder why the permit wasn't revoked years ago.

Mr. VAIL. He took it to court. We have gone through the Ninth Circuit Court.

Mr. YATES. Did the court let him stay on?

Mr. VAIL. For a period of time.

Mr. BURFORD. Then they gave him less than 10 days to get off. He appealed to me.

Mr. YATES. Were you tough?

Mr. BURFORD. Well, his permits are gone, let's put it that way.

Mr. YATES. How much time did you give him?

Mr. BURFORD. I didn't give him any. I let it go to the court. He wanted to negotiate a settlement with me or with the Bureau. I said no, the matter was in the court, and from what I could find out, it belonged in court.

Mr. YATES. If he is violating the law for year after year, I do not know what reason he has for sympathy. You didn't either?

Mr. BURFORD. I didn't either.

Mr. YATES. All right.

PROTECTION OF THE RESOURCES

Let me ask another question. With your reduced appropriation, will BLM accomplish the same level of resource protection and on the ground management of the public resources in 1983 as it has in the past? You have $10 million less, isn't the answer obvious?

Mr. CARRUTHERS. Mr. Chairman, I think we will do a better job than we have in the past. I think those reasons are, as we spelled out, that we have decentralized authority to make decisions on BLM lands. We sense that we are not going to have the kind of staff work and decision process bottlenecks we have had in the past, as we try to manage these lands. I think the selective management program and the new planning program both lead to real economies in managing public lands, and as a consequence we can do a better job.

Mr. YATES. That doesn't say very much about your predecessors, then, does it?

Mr. CARRUTHERS. Mr. Chairman, I think they did the best job that they possibly could, under the circumstances. We tried another tack which we think will work better.

Mr. YATES. For less money?

Mr. CARRUTHERS. Yes, sir.

Mr. YATES. And less people on the range?

Mr. CARRUTHERS. Not necessarily less people on the range. We didn't argue we were going to do that.

Mr. YATES. If you don't have the money to pay them, how are you going to have them on the range?

Mr. CARRUTHERS. You will see the pressures are downward. The elimination of personnel may occur in the BLM Washington office and in my office, as opposed to always in the Bureau district or area offices.

You will also note that the private sector will be expected to assume a greater burden of the maintenance and improvement of rangeland than they have in the past, which I think is consistent with the Administration's philosophy. That is going to be of great assistance.

Bob and I have talked to Ranchers on a number of occasions. They are eager to assume these responsibilities. So, I am optimistic we are headed in the right direction.

Mr. YATES. Ordinarily, you don't find lessees eager to assume more responsibilities that are going to cost them more money. What benefits do they get with the responsibilities which they are eager to assume?

Mr. CARRUTHERS. If you will permit them to manage the resource to improve it and let them gain some of the benefits of that improvement without overregulating them, then there are benefits to them. .

Mr. YATES. How do you know they aren't going to overgraze?

Mr. CARRUTHERS. The BLM is responsible to see that that does not happen. In the past, we have not always encouraged, nor were we structured to accept, some of the operators' contributions. We are moving in the direction of trying to form a partnership, particularly with grazers, so we can accept more private investment in the public land without a loss to the public in any control or without fear on the part of the private sector that they will lose all of their funds.

Mr. **Yates**. Are you changing the standards with respect to overgrazing and permitting longer grazing if they undertake certain responsibilities?

Mr. **Carruthers**. No, sir, I think there has to be a range improvement. The reward for range improvement is, of course, better grazing. If they are at the standard today and are willing to invest and improve productivity, then there would be a reward.

MINERALS LEASING

Mr. **Yates**. You are increasing the amount of your leasing. What about the question of greater burden on the public land from the energy development as it begins and expands?

Mr. **Carruthers**. What about a greater burden?

Mr. **Yates**. Won't you have a greater burden on the lands as you increase the number of leases?

Mr. **Carruthers**. Yes, sir.

Mr. **Yates**. Will the land be able to take that burden? Who supervises or makes sure that the land isn't being overleased?

Mr. **Carruthers**. Overleased for oil and gas?

Mr. **Yates**. And minerals.

Mr. **Carruthers**. The Bureau of Land Management, USGS, and Minerals Management Service are responsible for supervising that activity.

Mr. **Yates**. You have enough people to make sure that doesn't happen?

Mr. **Carruthers**. Yes, sir, we think so.

Mr. **Burford**. Part of the increase in money we are asking for is for checking and compliance with lease stipulations, right-of-way stipulations, and drilling permits and to make sure those drilling permits, and the stipulations in them, are complied with.

STAFFING STATE OFFICES

Mr. **Yates**. All right. Do you have any problem with respect to lack of resources and staffing at State offices?

Mr. **Burford**. No, sir.

Mr. **Yates**. Are the grade structures adequate?

Mr. **Burford**. We have looked at some grade structures in some of the offices. I am continuing to look at that. We find some turnover, and we find that this is true, especially in certain skills. Generally, the lower grades, such as in land records and jobs like that, where we train people and give them a skill, are hired out from under us. That is a problem we are taking a look at now. We are also taking a look at some of the grade structures for the geologists and mining engineers, and other special skills, because in the past, we have not been able to compete with the private sector for these people. However, we may be able to compete easier before too long if oil and gas drilling drops off as it looks like it might.

OIL AND GAS CASE BACKLOG

Mr. **Yates**. What is the current status of the Federal minerals management mapping program?

Mr. **Burford**. We have one person working on that at the present time. It has slowed down quite a bit because we are trying to catch up with the oil and gas leasing backlog.

Mr. **Yates**. How big a backlog is that?

Mr. **Burford**. Do we have the figures on the Eastern States backlog?

Mr. **Yates**. 4,000 cases?

Mr. **Burford**. Yes, 4,000 cases. If that follows the pattern of most State offices, about 35 percent are dependent upon BLM action. A lot of the backlog is caused by waiting for other agency actions such as Forest Service or Department of Defense, or other agencies. We are committed by our MBO system to eliminating the Bureau's oil and gas leasing backlog which we consider to be anything over 6 months old, by the end of calendar year 1982.

I had a report on the Eastern States office backlog this morning. They have set up a new system out there, a semi-automated system. We are now able to process cases at the rate of about 40 a day. So, we do intend to reduce that backlog.

Mr. **Yates**. Mr. Burford, how big is the backlog?

Mr. **Burford**. It is 4,848 cases.

Mr. **Yates**. Almost 5,000 cases?

Mr. **Burford**. Yes.

Mr. **Yates**. That is in one office. What is the national backlog?

Mr. **Burford**. There are a lot of acquired lands in the Eastern States. That is a greater problem. The Eastern States is an area where, because a large portion of the land boundaries are of the metes and bounds type it is tougher to process leases than anywhere else in the United States.

Mr. **Carruthers**. New Mexico has a serious backlog, Mr. Chairman. But I think most of that can be attributed to the recent announcement that some military lands were available for leasing. There are a considerable number of them.

Mr. **Burford**. Some leases were held up pending an MMS determination on some lands. A lot of those leases are on Department of Defense lands which have recently been opened. A lot of the military commanders will not consider leasing. But there are applications on that land, and they do have to be considered as a part of the backlog.

Mr. **Yates**. What is the national backlog?

Mr. **Carruthers**. It is 12,435 cases.

Mr. **Yates**. How many people have you got working on it?

Mr. **Burford**. Do we have a figure on the total number of people working on that? We can pull that figure.

[The information follows:]

PERSONNEL ASSIGNED TO OIL AND GAS BACKLOG REDUCTION

BLM does not keep a current tally of the number of employees assigned to the Oil and Gas Program for the purpose of reducing the backlog of lease applications. Because of the Bureau's commitment to eliminate this backlog on BLM lands by the end of 1982, the energy States are detailing employees from other programs to assist in this effort.

Mr. **Yates**. The question I am coming to, of course, is: How long will it take to catch up?

Mr. BURFORD. We are committed to eliminate the backlog on BLM lands by the end of calendar year 1982. We do intend to meet that objective.

Mr. YATES. How are you going to do that? You have only 9 months?

Mr. BURFORD. We are changing several things. We have had a team in the field looking at this situation. Some of the States have put in systems which have been working very effectively. We are going to make sure all of those ideas are incorporated and utilized throughout all the States. We think we can achieve that goal.

Mr. CARRUTHERS. Mr. Chairman, if we would focus on the Eastern States and two other States, we would have, we really have three problem areas, New Mexico, Oregon and the Eastern States office.

The rest of the offices are quite comfortable. For example, California indicates zero pending actions. It is a large leasing State. We have those three States with large backlogs.

So, we can focus our attention on those areas. It is a matter of employment for Director Burford and myself, and with the Secretary as to whether we get this accomplished by the end of the year. The Secretary has taken a rather strong position with regard to our accomplishing that objective. I think we have shifted some personnel in the Eastern States office from other activities to work on that backlog.

FEDERAL MINERALS MANAGEMENT MAPPING PROGRAM

Mr. YATES. Well, what happens to the mapping program? You have one person on it, I think you said, didn't you? When will you finish it? You had a target date of 1985. You aren't going to meet that now, are you?

Mr. BURFORD. I don't believe we are going to meet that target date.

Mr. YATES. How much money is in the budget for this?

Mr. BURFORD. According to Mr. Hildebeidel, we don't have a specific budget allocation for that. It is a part of the Eastern States office allocation. We have one person working on it at the present time.

Mr. YATES. You can't have very much allocated can you?

Mr. HILDEBEIDEL. No, sir. One person would be about $20,000. I think originally, that program, operated out of the Eastern States office, was budgeted, at the maximum, for about six people. It never really achieved that level. Four people, at most, worked on it. The critical areas that we have been looking at, such as coal leasing areas, have already been mapped, as well as some of the other areas with the greatest potential for minerals trespass.

Other areas to be mapped in the future are of lower priority. I can speak to this question as a former Eastern States Director, so I have direct knowledge of that particular program.

Mr. YATES. What you are telling the committee is that just the dregs remain in that program?

Mr. HILDEBEIDEL. The lower priority areas, yes, sir.

Mr. YATES. Those aren't that significant? Should the program be abandoned?

Mr. HILDEBEIDEL. I think the program needs to be seriously looked at as to how much additional work needs to be done in the future. Right now, clearing up the leasing backlog is certainly of much higher priority.

Mr. **Yates**. Isn't the mapping program almost a conditional procedure to having an adequate leasing program?

Mr. **Hildebeidel**. No, sir, not in oil and gas. Oil and gas is a public demand program. Mapping is most important for coal and other nonenergy leaseables, like phosphate.

Mr. **Yates**. What about the question of environmental studies; do you need the mapping program for environmental studies?

Mr. **Hildebeidel**. For oil and gas leasing, most of the Eastern States area has been covered by regional environmental assessments. And for coal leasing, it is done on a case-by-case basis.

RESOURCE MANAGEMENT PLANS

Mr. **Yates**. How important are resource management plans?

Mr. **Burford**. RMP's?

Mr. **Yates**. Yes.

Mr. **Burford**. We consider that they are important. How many have we completed?

Mr. **Vail**. We don't have any finished. We have six pilot RMP's underway right now.

Mr. **Carruthers**. It is a new designation, isn't it?

Mr. **Vail**. Yes, but they are a spinoff, the next step up from management framework plans.

Mr. **Yates**. You are cutting way back on your RMP's, aren't you?

Mr. **Vail**. Yes, sir.

Mr. **Yates**. Should you be doing that? Should the committee help you out by giving you money to move these?

Mr. **Carruthers**. No, sir. We have changed that——

Mr. **Yates**. Can I ask somebody in the field that question, rather than the Assistant Secretary?

Mr. **Carruthers**. Yes, sir.

Mr. **Yates**. The Assistant Secretary, generally, is married to OMB more than the others are. Isn't that your impression?

Mr. **Carruthers**. No, sir.

Mr. **Yates**. The others are equally as married?

Mr. **Carruthers**. The others?

Mr. **Yates**. I will use the word wedded instead of married. If these RMP's are important as Mr. Burford indicated, why are you cutting back on them? Why shouldn't the committee help you out if they are important? You know, the committee has been known to go over the budget on occasion. Are these important enough that the committee ought to go over the budget? Are they that important? What is your impression?

Mr. **Vail**. No, sir, the RMP process, as I said, is the next step up from the MFP's in planning sophistication. It is a dynamic program, so as we get additional data, we are going to upgrade our planning. The RMP process incorporates the EIS as a part of the process for a total decision document. It is a new step. In the past, we did the MFP then we did the EIS on a case-by-case basis. Now we are putting them together so we think it will be a time-saving and money-saving process.

At the same time, we are going to do RMP's only in those areas where we have issues that cause us to update or upgrade our existing planning. In the past, under the MFP process, we went out and did a plan on everything whether there was an issue there or not. We are now working on a priority basis, going forward on those that have issues. For that reason, it appears to be a cutback in the program, but if we have an issue I think we will do an RMP.

Mr. YATES. You are going to start 13 resource management plans in 1982, aren't you?

Mr. VAIL. Yes, sir.

Mr. YATES. Your last year budget estimate was 26?

Mr. VAIL. Yes, sir, we did cut back. But at the same time we think that some of those existing MFP's with some updating—short of a full RMP—will still be sufficient.

Mr. YATES. Here you are, making an all-out effort in the field of energy. How are you going to know the impact of energy uses unless you plan ahead of time to do the appropriate RMP?

Mr. VAIL. Most of the RMP's are going to be done in the areas where energy is the issue.

Mr. YATES. Strictly energy, no other uses?

Mr. VAIL. Well, not necessarily. Grazing is also an issue. By court order, we have to meet a schedule on grazing, so that will be an issue. But energy is the largest one, yes.

Mr. YATES. Will the reductions in funding and staff allow you to carry out a comprehensive multiple use review of your resources?

Mr. BURFORD. I do not know how comprehensive it will be, but we will continue to inventory and monitor all the resources in those areas.

Mr. YATES. You are going to concentrate mostly on energy leasing, aren't you, not all potential——

Mr. VAIL. In those areas, we don't just look at minerals when we do the RMP. If we do an RMP, we look at the total resource situation.

Mr. BURFORD. I think there is a misconception. If you look at our total renewable resources budget of $154 million and the energy and minerals budget of $99 million, we still have a preponderance of the resource money directed towards renewable resources.

RECEIPTS

Mr. YATES. Why were actual receipts for 1981 less than estimated receipts? Can you explain this, with the exception of onshore receipts? This bears on your estimates for this year. You spoke earlier about $18 or $19 billion in receipts for this year. When I look at the actual income, and compare it with your estimates, I find you are a couple of billion dollars off. This is on page BLM-13 of your justification.

Mr. BURFORD. BLM-13?

Mr. YATES. Yes.

Mr. HILDEBEIDEL. Are you asking for a comparison against 1981, sir?

Mr. YATES. 1981 and estimated 1982.

Mr. HILDEBEIDEL. The 1981 budget estimate was $725 million. The actual was $822 million.

Mr. **Burford**. No leasing?

Mr. **Hildebeidel**. In mineral leasing, sir, my information says that the 1981 budget was estimated at $725 million, and last year, in the 1982 budget, we estimated $824 million for 1981 mineral leasing receipts. Our actual receipts were $821,990,000, so that is relatively close to the current year estimates.

O&C receipts went down.

Mr. **Yates**. A difference of $2 million. Not far off on that one. But the total was——

Mr. **Hildebeidel**. OCS receipts were the major variants.

Mr. **Carruthers**. Forestry receipts went down some.

Mr. **Burford**. They are down again this year, because of the lumber market. They are not cutting any timber. I think they are $40 million off.

TIMBER HARVEST LEVELS

Mr. **Yates**. Was there any pressure on you to increase the timber cuts? There always is, isn't there?

Mr. **Burford**. I think so.

Mr. **Yates**. I just wondered whether this year, in view of the backlog, the attempt——

Mr. **Burford**. There is a lot of timber that is already sold that they would like us to delay cutting.

Mr. **Yates**. I know.

Mr. **Burford**. With the Canadian import situation, and the housing slump, there is a lot of uncut timber.

ONSHORE ENERGY LEASING

Mr. **Yates**. Let's turn to page 26 of your justification. Have you replied to the GAO report for February 8, 1982, which questioned whether the amount of leasing could be increased significantly because of inherent problems with the leasing system?

Mr. **Burford**. February 8, 19——

Mr. **Yates**. About two months ago—February 8, 1982.

Ms. **Blackstone**. Which one is that?

Mr. **Burford**. Accelerated onshore.

Ms. **Blackstone**. I don't believe we have responded to that yet, but we will.

Mr. **Yates**. You are taking the position that they are wrong, aren't you?

Ms. **Blackstone**. As I recall, that was the report that referred to the opening of the military lands, and the problems that were not anticipated which would interfere with expanded oil and gas leasing.

Mr. **Yates**. That is the one.

Ms. **Blackstone**. We feel we can handle those problems.

Mr. **Yates**. All right. We will have to find out, won't we?

Ms. **Blackstone**. Yes, sir.

Mr. **Yates**. You want an increase of 89 FTE's for fiscal year 1983. How many positions do you now have in this program?

Mr. **Burford**. We have 575 FTE's.

Mr. **Yates**. How many are filled? Is that authorized or filled?

Mr. **Burford**. That is budgeted.

Mr. **Yates**. All right, how many do you have actually on board?

Mr. **Burford**. I don't have that information with me but I can get it for you.

Mr. **Yates**. All right.

[The information follows:]

Increased FTE's in Oil and Gas Program

Under the Full Time Equivalency (FTE) workyear ceiling system, programs are no longer assigned position ceilings. The Oil and Gas Leasing Program was allocated 575 FTE workyears in the fiscal year 1982 budget. During the first half of fiscal year 1982 this program used 279 FTE workyears, 48 percent of the total allocation. We feel confident that all 575 FTE workyears will be used by the end of fiscal year 1982.

Mr. **Burford**. Looking at the total employment—9,217 is what we have on board at the present time.

Mr. **Yates**. Are you still having trouble on the military lands that you opened up?

Mr. **Burford**. Yes, sir, many base commanders do not recognize the existence of anything except a general with more stars.

Mr. **Yates**. You are not in the reserves?

Mr. **Burford**. No, sir, I put in my time as a corporal in the U.S. Marine Corps in the big war.

Mr. **Yates**. I was in the big war, too. Was that World War I, or II?

Mr. **Burford**. It is according to which war you were in as to which one is the biggest.

Mr. **Yates**. That is right. Well, if they recognize only generals, how are you going to get generals to bring you in there? Are you working with the Department of Defense?

Mr. **Burford**. Yes, sir. Let me ask Garrey's boss to go on up and talk——

Mr. **Yates**. Who is Garrey's boss?

Mr. **Burford**. Mr. Watt.

Ms. **Blackstone**. We have had recent indications of a more cooperative attitude on the part of the Defense officials.

Mr. **Carruthers**. Secretary Watt is in touch with the Department of Defense.

Mr. **Yates**. How long has he been in touch with them?

Mr. **Burford**. It is very recent.

Mr. **Carruthers**. Conversation is being opened up, Mr. Chairman.

Mr. **Burford**. I think what we need is the determination as to whether the military lands will be open to oil and gas leasing or not.

Mr. **Yates**. Yes. That makes sense.

I can understand the military. They don't want any interference with their military operations.

Mr. **Burford**. I would point out they also need fuel to run those tanks and airplanes.

ENVIRONMENTAL ASSESSMENT ON LEASES

Mr. YATES. The Forest Service completes the environmental assessment before any of their lands are open for drilling. Are you going to do the same thing?

Mr. BURFORD. We are looking at contingencies so that the environmental problems will be addressed, not at the time of issuance of a lease, but at the time of issuance of the permit to drill. There are a certain number of leases that never are drilled. On some of them, an application to drill is never made. We feel it is a waste of time to make all the environmental determinations if nothing is going to happen on the lease area. So some of those leases will be issued with the contingent right stipulation so that there will be a notice in them that there could be no drilling permitted if it was found environmentally unsound at the time the application for drilling was made.

Mr. YATES. Do you permit assignment of the lease?

Mr. CARRUTHERS. Yes.

Mr. YATES. With that kind of a stipulation, what is to prevent a lessee from holding a lease as a speculative matter, never intending to drill?

Mr. BURFORD. They can do that today.

Mr. YATES. Can they? Is that a good practice?

Mr. BURFORD. It is done.

Mr. YATES. I know it is done.

Mr. BURFORD. I do not know that it is typical, but it is possible.

Mr. YATES. How much do they have to pay you?

Mr. BURFORD. It is free.

SIMULTANEOUS LEASING

Mr. YATES. You had a practice of drawing by lot, didn't you? Is that still in existence?

Mr. BURFORD. Yes, sir.

Mr. YATES. Is that good? Should we be doing that?

Mr. CARRUTHERS. Simultaneous leasing?

Mr. YATES. Yes. Wouldn't you make more money if you offered them for open bidding?

Mr. CARRUTHERS. Those are leases that have been turned back in to BLM or have expired, Mr. Chairman. Apparently they weren't very highly valued, or people would have operated on the lease area. They turn them back in. We put them into a drawing pool just to attempt to be fair on re-issuing them.

Mr. BURFORD. We did increase the rental for the second 5 years from $1 an acre to $3 an acre to encourage drilling. We have also increased the filing fee; Congress mandated an increase to $25 or above. We have recently increased it to $75. What the exact effect of that increase to $75 will be, we can't determine at the present time.

In New Mexico, about $3 million came in, I think, on the last sale compared to $1 million on the one before; and in Wyoming, I think, in Montana, receipts are down. But, there is no assessment in those figures as to what kind of acreage was offered and whether the oil companies interested felt that the possibility of finding oil was good or whether it was strictly wildcat country.

Mr. **Carruthers**. Mr. Chairman, to add to the comment made earlier, only 20 to 25 percent of the oil and gas leases granted by BLM are ever utilized. That makes it difficult, when they are turned back in, to have a competitive market.

COMPETITIVE VS. NONCOMPETITIVE LEASING

Mr. **Yates**. Well, I would recommend that you read Senator Bumper's February 9th speech, if you have not.

Mr. **Burford**. I have read it, sir.

Mr. **Yates**. It seems to be very persuasive. He talks about a lease in the Ouachita National Forest. He says: "As a result of leasing that 80 acres on a competitive basis, we received a bonus of $103 per acre. If that same acreage had been leased . . . on a first-come, first-served, noncompetitive basis, it would have yielded the United States only $1 per acre or $80, in annual rent."

Only 3 percent of the leases are sold competitively, he says.

"In 1980, the average revenue per acre generated by competitive leases was $86.23 per acre, and the average revenue generated by noncompetitive leases was only $6.01 per acre."

Mr. **Burford**. Well, all the leases that are offered competitively under the present system are in known geological areas. That definition includes the producing wells. So it is natural there is a much greater interest in that type of area than there would be in wildcat areas.

We continue to study the systems by which we put up land for lease. If we come up with what we think is a method of producing higher revenue, we are obviously going to try to do it. But at the present time, with the increase in the filing fee on leases which are noncompetitive, we think that method does produce the most revenue.

We will also be looking at the definition of KGS because there is a lot more known about geology and structures and so forth today than there was when the Mineral Leasing Act was passed in 1862—I mean 1920.

CONTINGENT RIGHT STIPULATION

Mr. **Yates**. Suppose that after you have entered into the lease, and the lessee decides to drill, but environmental factors decree that the lessee should not go forward, is there any liability on the part of the Government?

Mr. **Burford**. With a contingent right stipulation, we do not feel there would be any liability on the part of the Government.

Mr. **Yates**. All those leases are subject to an EIS that clears them, right?

Ms. **Blackstone**. Not necessarily an EIS, but adequate NEPA compliance, an environmental assessment for example.

Mr. **Yates**. What happens if they do not get clearance from NEPA?

Ms. **Blackstone**. The contingent right stipulation allows additional environmental protection stipulations to be applied to the lease in the future. It is not necessarily intended to totally preclude development, but rather to allow additional environmental protection stipulations to be added at the time of the application for drilling.

Mr. YATES. Suppose the stipulations are such that they could not drill?

Ms. BLACKSTONE. Then the lease would be subject to those stipulations.

Mr. YATES. Is that in the lease itself?

Ms. BLACKSTONE. Yes, the contingent right stipulation is included in the least itself.

Mr. YATES. Would you put that in the record please?

Ms. BLACKSTONE. Yes.

[The information follows:]

CONTINGENT RIGHT STIPULATION

"All operations on this lease are subject to Government approval with such site-specific stipulations as may be necessary to assure reasonable protection of or mitigation of effects on other values. A plan of operations shall not be approved if it results in unacceptable impacts on other resources, and land uses, and/or the environment. If for these reasons a plan of operations cannot be approved, the lease term may be suspended for up to five years, subject to the timely submittal of an appropriate application by the lessee for a suspension of operating and producing requirements of the lease and approval by the United States. If the conditions do not change sufficiently, and/or significantly improved techniques are not developed such that a plan of operations has not been approved during the suspended term of the lease, the suspension shall automatically terminate. Unless relinquished sooner, the lease will continue for the term remaining at the effective date of the suspension or, if not suspended, for the term remaining when the plan of operations was disapproved, subject to Government approval of all operations as provided herein, without recourse for compensation."

COMPETITIVE LEASING

Mr. YATES. All right. There were 118,000 outstanding Federal leases in 1982, according to our figures. How many of those were issued competitively?

Ms. BLACKSTONE. Three percent. Historically, approximately 97 percent of our leases are issued noncompetitively, and 3 percent, competitively.

Mr. YATES. How many of the current outstanding leases are in production?

Mr. BURFORD. Do you have a figure?

Ms. BLACKSTONE. I do not recall that.

Mr. YATES. Can you put that in the record?

Ms. BLACKSTONE. Sure.

Mr. BURFORD. I am assuming that figure is available.

Ms. BLACKSTONE. It is.

Mr. BURFORD. I think it would be available from MMS.

Ms. BLACKSTONE. We have that.

[The information follows:]

PRODUCTIVE OIL AND GAS LEASES

Fourteen thousand (14,000) of the total 118,000 current outstanding oil and gas leases are in production. This comprises about 11.8 percent of those issued leases actually in production.

NATIONAL PETROLEUM RESERVE—ALASKA NPRA

Mr. **Yates**. Let's talk about NPRA for a minute. The first sale was scheduled for December, but was delayed because of antitrust guidelines suggested by the Justice Department. Has this issue been resolved yet?

Mr. **Burford**. Yes, the sale was held January 27, 1982, I believe.

Mr. **Yates**. What happened regarding the objections of the Justice Department?

Mr. **Burford**. We removed a couple of those stipulations to which Justice objected. I think we still have three if my memory serves me correctly. We now have another NPRA sale scheduled for May 26, and we think that we are still going to retain the same three stipulations that we had in the January sale. We will be offering about 3.5 million acres at the May sale; 1.5 million were offered at the January sale, with about 50 percent of it leased.

Mr. **Yates**. What about the question raised by the oil companies themselves, saying they did not have time to really complete their seismic studies?

Mr. **Burford**. Well, they are in a wildcat area; and in talking to some of the oil companies, some of them did raise that issue. Some of the others do not think that it is a valid issue. I think there have been 19 wells drilled under contract with USGS in NPRA. Some of the companies say that the information from those wells conflicts with some of the geophysical information that they have.

It is really an unknown area which makes it a high risk area. It also is a high drilling cost area. The companies estimate that it costs about $30 million to $40 million per well completion, and I think that was reflected in some of the bids. We think there is interest up there. There has never been any commercial production in NPRA.

Some of the companies are getting ready to drill, and will drill as soon as the leases are issued. They will start work as soon as the leases are issued. A big strike would change the picture everywhere.

Mr. **Yates**. How valuable was the seismic information that Husky Oil Company made available?

Mr. **Burford**. These were just comments from some of the people that I talked with. I did not identify which seismic information they were talking about.

SECTION 1008 STUDIES

Mr. **Yates**. Have the studies and consultations that are supposed to take place under Section 1008 of ANILCA been completed?

Mr. **Burford**. I think they are underway, if I remember correctly.

We have opened two leases after consultation.

OIL AND GAS INVESTIGATION

Mr. **Yates**. What is the current status of the investigation being made by the IG on the simultaneous leasing system?

Mr. **Burford**. I think that is over.

Mr. **Petty**. No, it is not over with. The IG has taken over full responsibility for the investigation, and it is an ongoing investigation. They have several parties under investigation right now, and I think about four cases are under active consideration by the U.S. Attorney. At this moment, BLM is not involved, other than to assist the IG with the investigation as requested.

Mr. **Yates**. What were the fraudulent practices?

Mr. **Petty**. The primary thing was multiple filings. Regulations prohibit an individual from filing more than one application on a given tract, or having an interest in more than one application. The frauds involved individuals getting other people to sign lease applications in blank, then putting their own names in the blank applications. That particular individual who would do all the filings was getting a better than one-to-one chance for the leases.

COAL LEASING

Mr. **Yates**. All right. Let's talk about coal leasing. You recently completed revision of your regulations. Are those regulations generally accepted now? There was some question about them for a while.

Ms. **Blackstone**. The new regulations were proposed and the comment period closed about a month ago. We are currently analyzing the comments that were received, which were both pro and con. We have not yet prepared the final rulemaking package based on those analyses.

Mr. **Yates**. Have you decided how the demand for reserves will be determined?

Ms. **Blackstone**. The demand for coal reserves is one of about nine factors that go into the determination of leasing levels. We are working with the state Representatives of the coal States to develop better methods for estimating reserves as one of the factors that goes into the determination of leasing levels.

Mr. **Yates**. Has the role of the States been changed by your regulations?

Ms. **Blackstone**. Not significantly. We think that the proposed changes in the coal regulations actually enhanced the State roles.

Mr. **Yates**. Who has the final authority to decide leasing goals?

Ms. **Blackstone**. The Secretary of the Interior, as he always has.

Mr. **Yates**. What about the States?

Ms. **Blackstone**. The States certainly are interested in having as much input as possible. They seem to be pleased with the present level of consultation.

Mr. **Yates**. What about the question of due diligence of existing leaseholders, has that changed?

Ms. **Blackstone**. There has been a proposed change, but new regulations have not become final.

Mr. **Yates**. What is the proposed change for that?

Ms. **Blackstone**. For diligence? It would reduce the amount of coal that was required to be mined per year from 2.5 percent to 1 percent, for example.

Mr. **Yates**. Why is that proposed? Why do you propose that change?

Ms. **Blackstone**. There were a number of reasons that went into the Secretary's decision to propose that. One of them was the amount of time that it takes to obtain permits and arrange financing and get leases into production.

Mr. **Burford**. There are a lot of mines that are based on a forty-year mine life. It takes so long to get going in some of this mining when it requires so heavy an investment, if anyone goes in to the point where they are going to produce 1 percent of that coal, they are going to have to keep mining.

Coal mining today is not a wheelbarrow and pick and shovel operation. It is highly capital intensive. They will have to mine, by the time they put that much money into it.

Mr. **Yates**. You are going to mine.

Mr. **Burford**. Yes, sir. You do not put the money into it unless you have a contract ahead of you to get that coal sold.

Mr. **Yates**. Well, the Office of Technology Assessment has reported that we are going to be surfeited with coal by 1991. Is that your guess as well?

Ms. **Blackstone**. I think it remains to be seen how much coal will go into production. But the lessees are still subject to the diligence requirements. The one change in addition to the percentage change would be to change the 10-year period to be 10 years from the date of readjustment of the coal leases, rather than from the 1986 date for all leases.

The market conditions and the prices of oil and related engineering prices will all determine the amount of coal that is available. The leases do have diligent development requirements, and we will be enforcing those.

Mr. **Burford**. As you know, transportation is one of the big costs in coal.

Mr. **Yates**. What about your own report from the Powder River coal region? That indicates you are going to have a supply surplus, does it not?

Ms. **Blackstone**. That report was based on various alternative leasing levels and demand levels. And one of the objectives in our proposed changes to the coal regulations was to eliminate the one-to-one correlation between the amount of coal leased and the expected demand, because we feel there has to be a buffer to accommodate the demand for reserves since not all of those coal reserves will go into production.

Mr. **Yates**. You decided not to set any of that area aside for small companies?

Ms. **Blackstone**. There is one, I believe, out of the final decision.

Mr. **Carruthers**. There are two.

Ms. **Blackstone**. Did you say two? I do not recall. There was at least one.

Mr. **Yates**. We had the impression there were none.

Ms. **Blackstone**. No, I believe there was one tract in Montana that was a small business set-aside.

Mr. **Yates**. How did that sneak in?

Mr. **Burford**. We will confirm it.

[The information follows:]

Small Business Set-aside

The Coal Creek Tract in Montana, containing 60 million tons of recoverable coal reserves, was set aside as a special bidding opportunity for small business in the Power River Coal Sale.

COAL SALES

Mr. Yates. Are there any additional coal sales planned for 1982 after the Powder River sale?

Mr. Burford. We have got one in San Juan, and one in—I do not remember the dates, but I can find it. Do you remember the dates on those?

Ms. Blackstone. We have a schedule which we would be happy to supply for the record.

Mr. Yates. Put that in the record.

Ms. Blackstone. All right.

[The regional coal lease sale schedule, table 2, follows:]

Table 2 - REGIONAL COAL LEASE SALE SCHEDULE

	1st Quarter			2nd Quarter			3rd Quarter			4th Quarter		
	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
FY 1981			APP #1a	GR #1a			GR #1b			UI #1a		
FY 1982	GR #1c		APP #1b		UI #1b		PR #1					
FY 1983									FU #1			SJR ##1
FY 1984			UI #2			GR #2	PR #2			APP #2		
FY 1985											GR #3	FU #2
FY 1986			UI #3							PR #3	SJR #2	

Federal Coal Regions

GR - Green River-Hams Fork
UI - Uinta-Southwestern Utah
PR - Powder River
FU - Fort Union

APP - Southern Appalachian, Alabama Subregion
SJR - San Juan River
DR - Denver-Raton Mesa (first sale expected in FY 1987)

Lease Sale

1 or 1a - Initial first round lease sale
1b, 1c - First round follow-up sales
2 - Initial second round sale
3 - Initial third round sale

Note: The sale schedules during calendar years 1985 and 1986 have not been firmly designated in these specific months.

COAL PROGRAM REDUCTIONS

Mr. YATES. How do you arrive at a reduction in your site-specific EIS's?

Ms. BLACKSTONE. That is an estimate of the reduction in the number of site-specific EIS's that would be required. Most of our coal leasing is done on the basis of regional EIS's.

For example, the Powder River Basin sale is based on a regional EIS. The estimated workload for site-specific EIS's is based for example, on leasing by applications, or issuance of a preference right lease application. Those are actions that do not generally fall into a regional EIS.

Mr. YATES. Well, how realistic is your plan to process 85 PRLA's? Last year's estimate was only 36.

Ms. BLACKSTONE. We have set a goal of processing the PRLA's, and the BLM State offices have committed themselves to meeting that schedule.

Mr. YATES. From 36 last year to 85 this year is quite a jump. Can you do it?

Ms. BLACKSTONE. I believe we can.

Mr. YATES. How much money is in your budget for coal trespass activities? If there is no specific amount, how are you going to deal with it? Are you going to deal with coal trespass activities?

Mr. PETTY. We are continuing to deal with those, Mr. Chairman.

Mr. YATES. How are you going to pay for them?

Mr. PETTY. It is not a major activity at the present time. In spite of the publicity given to it and despite the tremendous work we have put into it in the past few years, almost all of the work has been completed. I was saying earlier, the minerals mapping program for that area has been completed for the coal areas, and most of the suspected trespassers have been investigated.

LANDS TURNED OVER TO PUBLIC BODIES

Mr. YATES. Would you please place in the record a list of public lands that have been turned over to public bodies, such as States, counties or cities, during the last year.

I do not know whether you have a list of lands that you propose to turn over to private people. You do not have that yet, do you?

Mr. CARRUTHERS. No, sir, we have a list of the lands turned over in 1981. I think there were about 10,000 acres transferred to communities.

Mr. YATES. All right.

Mr. PETTY. We have a complete list of R&PP leases.

Mr. YATES. They are transfers of ownership, are they not?

Mr. CARRUTHERS. You and I consider them totally transferred but BLM does not.

Mr. PETTY. It is several pages.

Mr. YATES. Good enough.

Mr. CARRUTHERS. We can also indicate in those data the requests pending.

Mr. YATES. That would be fine.

Mr. CARRUTHERS. All right.

[The information follows:]

PUBLIC LAND TRANSFERS

The two primary authorities under which public lands have been transferred to state and local governments are the Recreation and Public Purposes Act (R&PP) and the State Indemnity Selection (SIS) program. Acres transferred in fiscal year 1981 were as follows:

	Acres
SIS	68,300
R&PP patent	5,220
R&PP lease	90,170
Total	163,690

As a result of Secretary Watt's invitation to Western governors to identify parcels of land which could meet community expansion and public purpose needs, the states responded with requests for 963,694 acres. The attached summary sheet lists the acres requested and acres conveyed as of April 1, 1982. The requests are still being examined, but some of the acreage is presently administered by other Federal agencies, such as the Forest Service and Bureau of Reclamation. Processing the requests is receiving high priority in fiscal year 1982. The amount of acreage which will ultimately be transferred as a result of this program is unknown.

In addition, the Bureau is programmed to convey approximately 148,000 acres in fiscal year 1982 under the SIS program.

It should be noted that all of the above figures exclude Alaska.

REPORT OF LAND TRANSFER ACTIONS UNDER SECRETARIAL GOOD NEIGHBOR PROGRAM

[Summary sheet]

State of Requesting entity	Number of individual requests	Acres	
		Requested	Authorized[1]
Arizona	31	62,012	2,452.25
California	30	179,350	1,354.91
Colorado	17	55,641	325.64
Idaho	29	6,800	321.55
Montana	31	9,226	104.82
Nevada	33	321,000	2,542.97
New Mexico	22	19,576	265.00
Oregon	37	6,893	2,262.91
Utah	46	87,000	1,572.23
Wyoming	85	203,530	1,464.40
Total	361	951,028	12,666.68

[1] Some completed actions are not the direct result of the community expansion/community needs requests submitted in response to Secretary Watt's February 4, 1981, invitation. They do represent "Good Neighbor" type actions completed or near completion by BLM.

GEOTHERMAL LEASING

Mr. YATES. Let's talk about geothermal leasing. According to page 38, you want to issue 1,150 noncompetitive leases in 1982. The word that comes to my mind is "wow", because all you issued in 1981 was 264.

Ms. BLACKSTONE. That is correct.

Mr. YATES. What does the lessee have to pay for a noncompetitive lease that you issue?

Mr. BURFORD. In 1981?

Mr. YATES. Yes. You only issued 264.

Ms. BLACKSTONE. A total of 631 noncompetitive leases were processed for the fiscal year 1981.

Mr. YATES. What does the lessee pay for a noncompetitive lease?

Ms. BLACKSTONE. I do not recall the fees.

Mr. **Yates**. Do they pay anything?

Ms. **Blackstone**. They do pay rentals and royalties, and there is a filing fee. I do not recall the exact figure, but the increase in leasing is the result of efforts to reduce a substantial backlog that had developed in previous years. That is the reason for the dramatic increase.

And in order to process that many cases, we have developed stipulations that will help streamline the process.

Mr. **Burford**. Mr. Yates, on the one geothermal lease that I am familiar with that has actually been developed, I think our royalty income, if I remember correctly, is around $2 million a year. I can look that figure up for you. The lease is 500 acres, I think.

GEOTHERMAL LEASING BY THE HUNT FAMILY

Mr. **Yates**. Let's talk about geothermal leasing. Last year we experienced a case in which the Government was taken advantage of by the Hunts. Do you remember that case?

Mr. **Burford**. On geothermal?

Mr. **Yates**. Yes.

Mr. **Burford**. No, sir, I do not.

Mr. **Petty**. There was quite a bit of discussion in last year's testimony.

Mr. **Yates**. Right. There was. I read from the record, page 409 of part 9 of last year's hearings:

> Mr. **Yates**. What is the single largest landholding of any of your oil and gas leases on public lands?
>
> Mr. **Hastey**. There is a maximum by State in the amount of 260,000 acres.
>
> Mr. **Petty**. I don't recall that there is a maximum.
>
> Mr. **Hastey**. There is a maximum that any one company can hold by State and in geothermal it is something in the neighborhood of 20,000 acres and it seems to me that oil and gas is over 200,000 acres. I thought it was 260,000 acres, but I could not tell you for sure.
>
> Mr. **Yates**. Is that including assignments?
>
> Mr. **Hastey**. Yes. In other words, they cannot hold more than that.
>
> Mr. **Yates**. Can they hold it through affiliated companies? Can a subsidiary hold it?
>
> Mr. **Petty**. Not if they control the subsidiary.
>
> Mr. **Yates**. Is that true of all your leasing or just oil and gas?
>
> Mr. **Hastey**. Geothermal has a maximum by State and oil and gas has a maximum by State.
>
> Mr. **Yates**. How much can you hold?
>
> Mr. **Hastey**. Coal also has a maximum number by State.
>
> Mr. **Yates**. What are you going to do about the Hunts then, as far as the family is concerned?
>
> Mr. **Hastey**. Well, in the Hunt situation, under one company's name, they do not hold in excess of 20,000 acres. We have asked our solicitor to review the Hunt situation, and give us some legal advice. We have not thought that they have been in violation of the 20,000-acre limitation the way they set up their trustees, but we have the lawyers looking at it now to give us some advice.
>
> Mr. **Yates**. According to the article in the Washington Post, the Hunts are doing that, aren't they?
>
> Mr. **Hastey**. That is right. They have been probably by far the most active in the San Joaquin area.
>
> Mr. **Yates**. I am afraid so but look at the amount. BLM records show that virtually all the Hunt investments have been in Oregon and Idaho. They have also filed for noncompetitive leases in Arizona and California. Getting a noncompetitive geothermal lease is a relatively simple procedure, it takes about 20 minutes to fill

out the forms. The maximum size for an individual geothermal claim is 2,560 acres or four square miles.

Mr. **Hastey**. That is one lease.

Mr. **Yates**. How does it happen that Nelson Bunker Hunt has leased 50,000 acres in his own name?

Mr. **Hastey**. It is in more than one State.

Mr. **Yates**. How many States is that, ten States or nine States?

Mr. **Hastey**. We have issued leases, I would say, in probably seven of the States. Although we have applications for leases in 10 States.

Mr. **Yates**. Say that again.

Mr. **Hastey**. Ten States have geothermal type leases and/or applications.

Mr. **Yates**. Now Nelson Bunker Hunt has leased 50,000 acres in his own name in how many States, would you know?

Mr. **Hastey**. No, I don't know.

Mr. **Pedersen**. It would have to be at least three States.

Mr. **Yates**. Why do you say three States? It says there is a limitation of 2,560 acres.

Mr. **Pedersen**. Each lease is 2,560 acres. The Federal law limits each person to 20,480 acres within a State. The Hunts have made applications in 20 names, including their corporations and trust funds consisting of various groups of people.

Mr. **Yates**. That is contrary to the purpose of the law, not the language, is it not?

Mr. **Hastey**. It is probably contrary to the spirit of the law and that is the one thing we are asking our lawyers to look at.

Mr. **Yates**. Nelson Bunker Hunt has leased 50,000 acres in his own name. Dwight LaMar has the biggest individual holding, more than 56,000 acres. Herbert has 24,000 and his wife Nancy has 23,500. The son Douglas is the owner of 21,000. Then there are trusts composed of various Hunt family members. The Hunt son-in-law has 24,500 acres under lease, about 45,000 acres are held by the Rosary Corporation whose mailing address is the Dallas office of the various Hunt enterprises.

That is a lot.

Mr. **Carruthers**. Mr. Chairman, I was not aware of that.

Mr. **Yates**. Now, have you asked your lawyers to look at it?

Mr. **Petty**. I do not recall that the lawyers ever found the Hunts doing anything illegal in that whole thing.

Mr. **Yates**. Really? But surely what they are doing is contrary to the spirit of the law.

Mr. **Petty**. It could be contrary to the spirit.

Mr. **Yates**. Is your lawyer here?

Mr. **Petty**. They are not with us at this hearing.

Mr. **Yates**. Would you ask your lawyers whether they looked into this, because I think it is a violation of the spirit of the law.

Mr. **Petty**. We can get that tonight and respond tomorrow.

Mr. **Yates**. That just does not make sense to me. It is an awful lot of acreage in one family.

GEOTHERMAL LEASE RATES

Mr. **Petty**. They cornered an awful lot of silver, too.

Mr. **Yates**. If they do not have to drill, they cannot get hurt in geothermal, can they? And they do not have to pay anything for a lease.

Ms. **Blackstone**. They do have to pay.

Mr. **Yates**. How much?

Ms. **Blackstone**. A noncompetitive lease is $1 an acre, and competitive is $2 an acre.

Mr. **Yates**. Well, I guess the Hunts can afford $100,000 a year if they get 100,000 acres, can they not? Does any of that take place, that you know of, in other leasing activities?

Mr. **Burford**. There is a statutory limitation on oil and gas leases of about 200,000 acres per State.

Mr. YATES. Could you take 200,000 acres in your name; and your wife take 200,000; and your son take another 200,000; and your son's wife take another 200,000; and their children take 200,000 each, so that you wind up with several million acres?

Mr. BURFORD. I would assume so.

Ms. BLACKSTONE. If the law reads as number of acres per person.

Mr. BURFORD. For oil and gas leases the maximum allowed is 246,000 acres per State.

Mr. YATES. Should that be limited do you think, Mr. Burford? Should a family get 100,000 acres like that? 200,000 acres? That is kind of a monopoly then, is it not?

The lawyer on your right shakes her head no. What do you think, counselor?

Ms. BLACKSTONE. A hundred thousand acres does not, in my opinion, constitute a monopoly for the millions of acres that have potential for this. It also depends upon the particular mineral. Some of the limits are different for different minerals under the statute. But those are the acreage limitations that are set by the statute for various minerals.

Mr. YATES. I asked you for information to find out about the Hunts. Can you also find out whether they are doing anything with their leases?

Mr. BURFORD. Yes; we can find that out.

Mr. YATES. Find out whether or not they are just holding them. Do they also have leases on oil from you?

Mr. BURFORD. I would imagine they do. They are large operators in oil and gas.

Mr. YATES. I know, they are indeed.

Mr. BURFORD. And sugar and silver.

Mr. YATES. Not so large in silver any more.

Mr. BURFORD. Not as large as they used to be.

Mr. YATES. Yes.

[The information follows:]

FEDERAL GEOTHERMAL LEASING BY THE HUNT FAMILY

In March of 1981, BLM and USGS staff considered the question of whether any members of the Hunt family were in violation of the geothermal lease acreage limitation. Records indicated that no violation existed.

In the course of the records search, the following information came to light. Of the lease applications on file at that time by members of corporations of the Hunt family, 10 percent were filed in 1974; 25 percent were filed in 1975; 2 percent each in 1976 and 1977; 10 percent each in 1978 and 1979; and 40 percent in 1980. This spacing in terms of lease applications filed suggests that members of the Hunt family were not attempting to monopolize Federal geothermal leases or, if they were, they had certainly allowed adequate opportunity for others to file applications ahead of them.

Finally, it was noted that most of the leases held by Hunt family members were noncompetitive. They had not been very aggressive in bidding at competitive lease sales. This was taken as another indication that they were not attempting to monopolize Federal geothermal leases.

With respect to whether members of the Hunt family or their corporations are pursuing development on Federal leases, the USGS reported that diligent exploration was generally being performed although specific information was proprietary.

The entire matter was informally discussed with the Office of the Solicitor, with general agreement that there was no cause to pursue the matter further.

Would your records indicate the names of your major leaseholders? We have it here, on page 413 of last year's hearing record volume 9:

> Peabody; Continental Oil; Lincoln Corporation; Pacific Power and Light; AMAX has 79,000 acres; Aminoil USA has 64,000 acres; Atlantic Richfield, 60,000; the Hunt family, filed under the Hunt name only; and Phillips Petroleum.

How many of those leases are small business? There are not many, are there?

Mr. BURFORD. Not holding that kind of acreage, no.

Mr. YATES. No. Okay.

TAR SANDS

As I recall, you requested a deferral on tar sands. Excuse me. That was the Department of Energy. Are you doing anything with tar sands? Are you leasing for tar sands?

Ms. BLACKSTONE. We are currently developing regulations, and we have proposed regulations under the Combined Hydrocarbon Leasing Act which was passed by Congress in November of last year. We have proposed regulations for conversion of existing leases to combined hydrocarbon leases, and we are presently in the process of developing regulations for competitive leasing in what are known as special tar sands leasing areas.

Mr. YATES. Do you have tar sands leases now?

Ms. BLACKSTONE. No, we have not issued any yet. We will be. The first ones will probably be the result of conversion of existing oil and gas leases.

Mr. YATES. Why conversion rather than outright lease? Why are you converting, just by way of information?

Ms. BLACKSTONE. The companies are converting leases in the areas that they are interested in developing tar sands in—areas which had previously been leased for oil and gas. Under the Combined Hydrocarbon Leasing Act, they can now get a lease if they submit an application and plan of operations for not only the oil and gas, but also for the tar sands under the combined hydrocarbon lease.

Mr. YATES. I see.

OIL SHALE

You have advanced the oil shale program from fiscal 1985 to February 1983. Is that realistic?

Ms. BLACKSTONE. I am not familiar with your 1985 date.

Mr. YATES. That was in last year's testimony; you thought it would take that long to establish a permanent oil shale program.

Ms. BLACKSTONE. Yes, it has been accelerated.

Mr. YATES. Now you think you can do it in 1983.

Ms. BLACKSTONE. The regulations will be in place in 1983. The first leasing will not take place until early 1984.

Mr. CARRUTHERS. We still have authority to use the prototype program.

Ms. BLACKSTONE. Yes, and we are also considering additional leasing.

REGIONAL OIL SHALE STUDY

Mr. YATES. What is the reason for blocking the regional study on oil shale development?

Ms. BLACKSTONE. Director, would you like to respond to that? Are you referring to a regional oil shale study that was proposed in Colorado?

Mr. YATES. That is the one.

Ms. BLACKSTONE. That was in response to a right-of-way application.

Mr. YATES. "Burford Makes a Bad Decision," is the headline of a newspaper article.

Mr. BURFORD. That is the only one I have ever made.

Mr. YATES. The only bad one, or the only decision?

Mr. BURFORD. You are making me out as batting zero?

Mr. YATES. I am not going to make you out as anything. Do you want to comment on this?

Mr. BURFORD. Yes, I do not think the newspaper article was accurate.

Mr. YATES. Tell us why.

Mr. BURFORD. There will be an environmental impact statement on that particular right-of-way. At the time that I made the decision that we would not go with a basinwide EIS, we were looking very closely at whether we would have a programmatic environmental impact statement, or not.

Also, at that time, oil shale legislation was pending before Congress which we had hoped would pass during the first portion of this session of Congress. That legislation still has not passed. In addition, there is an EIS going on regarding that particular right-of-way which does take into account the cumulative socioeconomic impact. If we do the programmatic EIS, it will also take that into account, as well as the impact of any other leases that are issued.

It was also apparent at the time the decision was made that there was a very great deal of uncertainty in oil shale programs. I felt from looking at statistics available to me that the right-of-way might be the only private program that went ahead and that we would not be having a great rush of programs in oil shale.

Since that time we have had two of the companies abandon their plans on a couple of the Government leases. At the present time there are only two companies continuing with development, and they are the companies that have the Synthetic Fuels Corporation guarantees on at least a part of the operation. Exxon is going ahead with their lease operations. Most of them have decided to reduce operations because of the oil market drop.

THE WARNER BILL

Mr. YATES. What about Senator Hart?

Mr. BURFORD. What about Senator Hart?

Mr. YATES. I was going to ask you about the Warner bill. Has the Department taken any position on the Warner bill?

Mr. CARRUTHERS. Yes.

Ms. BLACKSTONE. The Department is in favor of it. Did you not testify on that?

Mr. CARRUTHERS. Yes.

Mr. **Yates**. Senator Hart, in response to your testimony, says in an article in the Washington Post, "We are, in effect, putting my State up for grabs. This bill allows for too much development and too fast." I take it that you do not agree with Senator Hart?

Mr. **Burford**. If I do not, it would not be the first time.

Mr. **Yates**. By testifying in favor of the bill, the Department takes a view contrary to Senator Hart, that is the point I was making.

Mr. **Carruthers**. Mr. Chairman, those differences are somewhat limited I believe. One is the number and size of the leases that can occur in any one State. We do differ with Senator Hart on that issue.

Mr. **Yates**. I see.

Mr. **Carruthers**. Secondly, I think the development makeup of the Advisory Board has been contested, and the Department has worked with Senator Hart, Senator Armstrong and others to try to resolve that issue.

But I think otherwise we are coming down on fairly common ground.

OIL SHALE ROYALTY RATE

Mr. **Yates**. Is not the royalty rate for an oil shale lease set at 2 percent?

Ms. **Blackstone**. No.

Mr. **Yates**. Where did I get the 2 percent figure? I thought I asked the Secretary about that, did I not?

Ms. **Blackstone**. It is in the lease form. It is a flat rate which can be escalated. There was a Washington Post article—

Mr. **Yates**. That article says the rate is 2 percent.

Ms. **Blackstone**. That it is equivalent to 2 percent.

Mr. **Yates**. That is right. I was going to ask, why 2 percent, rather than 16 percent as you have in your regular oil and gas leases?

Ms. **Blackstone**. The only oil shale leases that we have now are the prototype oil shale leases. The royalty rate is specified in the lease as 12 cents per ton of oil shale for certain quality and it is escalated based upon the crude oil price in the three-State region.

I think someone did do a calculation that made it come out at current prices to be the equivalent of 2 percent today. That is for those existing leases. We have not yet determined what the royalty rate might be for future leases.

Mr. **Yates**. Will you be determining that?

Ms. **Blackstone**. We expect to be doing it as part of the long-term regulatory program.

OIL SHALE DEVELOPMENT

Mr. **Yates**. What happens to the State of Colorado, now? Have the companies who are undertaking the oil shale programs conquered the environmental problems as to where to put the rubble that they use and have you conquered your water problems?

Mr. **Burford**. The ones that are operating today, there are only two of them.

Mr. **Yates**. Only two of them?

Mr. **Burford**. In any extensive form there are only two.

Mr. **Yates**. Are they modified in situ?

Mr. **Burford**. They have a place for spent shale disposal. It will always be a problem, but they believe they can solve it. I think they can solve it. But it is one that will have to be solved before they can go ahead.

They will be required to solve it.

Mr. **Yates**. What will they be required to do?

Mr. **Burford**. To not only take that spent shale but they will be required to reclaim it in some way or another. They have made numerous experiments, some of which have been successful, some of which have been only partially successful in revegetating on top of spent shale. They have done a lot of experimenting with various types of grasses. Some of their methods include covering the shale with top soil, some do not.

Mr. **Yates**. What about water?

Mr. **Burford**. Most of them have water rights at the present time which are sufficient for the development which is taking place and there is sufficient water for a certain amount of development in the future. In Reudi Reservoir there is still 40,000 acre feet of water which has not been sold.

I think 10,000 acre feet was sold within the past 2 years. I think about 2 years ago there was 50,000 acre feet of unsold water in Reudi Reservoir.

Mr. **Yates**. Does this mean your problems in Colorado with water have all been settled?

Mr. **Carruthers**. No.

Mr. **Burford**. Mr. Yates, I am not sure I want to answer that question on the record. No, I do not think those problems have all been solved. I think water storage is essential to the well-being of the West.

Mr. **Yates**. First of all, do you ask the States for their agreement on giving leases, or do you take into consideration the attitude of the States.

Mr. **Burford**. We take that into consideration.

Mr. **Yates**. You take it into consideration, but you do not necessarily have to follow it.

Mr. **Burford**. We do not necessarily have to follow it, but we have been working very closely with the States.

Mr. **Yates**. Has the State of Colorado taken any position with respect to oil shale?

Mr. **Burford**. I do not think they have had to take a position because there have not been any leases. I think they will be very concerned about it.

There are people in the State of Colorado who will adamantly oppose any further leasing, and there are people throughout the United States who will oppose most anything, sometimes, it seems, just for the sake of opposing.

However, if the socioeconomic impact is carefully looked at, and they feel certain that the water problems are addressed, that the development is spread out, and if you study some of the demographics of oil shale development, it does not all take place all at once. The employment curves are such that you can level out across the peaks and valleys.

I think that Exxon is one company that is demonstrating a great deal of concern. They are building an infrastructure for practically a city and for which they are prelaying all the utilities underground.

They have made arrangements for the domestic water. They have contributed a certain amount of money to the counties, and they are contributing land and tax base for schools. I think they are doing a good job of addressing some of the problems which that development will cause.

PAYMENTS IN LIEU OF TAXES (PILT)

Mr. **Yates**. A question occurs to me, with respect to a company like Exxon, or any company with whom you enter into a lease for oil shale, are the acres that are the subject of that lease included in the base for PILT payments?

Mr. **Burford**. They are at the present time.

Mr. **Yates**. Even though they are leased out from the Federal Government to a private company? The reason I ask the question is because——

Mr. **Burford**. With recent legislation I think they would be.

Mr. **Hildebeidel**. Yes, those lands are included.

Mr. **Yates**. The reason I ask the question, you say Exxon is making arrangements to provide funds for schools and things of that sort. That is what PILT was supposed to take care of, was it not? And if the Government——

Mr. **Burford**. Partially.

Mr. **Yates**. Well, among other things. But that was one of the things I remember. Where is your PILT legislation, incidentally?

Mr. **Burford**. It is in the Secretary's Office of Policy, Budget, and Administration.

Mr. **Yates**. It is impossible, is it not, to get agreement from everybody on the PILT legislation?

Mr. **Burford**. It is difficult.

Mr. **Yates**. What is your feeling? The name of the statute is Payments in Lieu of Taxes. Should the payments that are made be the same as the taxes paid would have been were they private lands?

Mr. **Burford**. Well, I think that is what local areas would like to see. I do not think we will approach anywhere close to paying that.

Mr. **Yates**. I thought you were paying more. At least I have the impression you are paying much more in the State of New Mexico for example, because of the oil and gas leases. The royalties that are paid under that.

Mr. **Petty**. The difference, Mr. Chairman, is that the oil and gas royalties go to the States. The States do not pass that down to the counties.

Mr. **Yates**. I know. I know. Well, we compel the States to pass the money to the counties on other payment legislation. Do we not require them to pay it to the counties under forest programs?

Mr. **Petty**. There is a direct payment there.

Mr. **Yates**. Why can you not do that? Why can you not provide for direct payment?

Mr. **Petty**. If the legislation were changed, we might be able to do that.

Mr. YATES. The big complaint of the counties is that the States do not pass it through. Does your legislation provide for direct payment to the counties?

Mr. CARRUTHERS. We have not developed it. That is a debatable point in the Department of the Interior.

Mr. YATES. I am sure it is, in the States, too. I am sure the counties want it and the States do not want the counties to have it. They would rather the Federal Government paid the extra amount of money.

OIL SHALE PRODUCTION

Well anyway, do you have an estimate as to what oil shale production is likely to be by 1990?

Ms. BLACKSTONE. No, we do not yet. That will be developed as part of our program plan.

Mr. YATES. Have you an overall schedule for lease sales on a permanent program?

Ms. BLACKSTONE. No, not yet.

Mr. CARRUTHERS. Mr. Chairman, we are very tentative about development of the permanent program. We are awaiting the decision of Congress with regard to the oil shale legislation.

Mr. YATES. You are proposing to lease for both oil and gas and for oil shale in western Colorado. Is there any distinction that ought to be made with respect to that kind of leasing?

Mr. BURFORD. Oil and gas leasing is a continual thing.

Mr. YATES. I know, but now you are moving with oil shale into the same area. I wondered whether the leases were the same. You have many more worries with oil shale and with oil and gas because of water and spent rubble and so forth, do you not?

Mr. BURFORD. Yes, sir. That environmental impact does have to be analyzed entirely differently than it does for oil and gas drillings.

Mr. YATES. Is Colorado part of the overthrust belt?

Mr. BURFORD. I think that is a question which remains to be determined. In general, the overthrust belt is thought to pass to the west of Colorado.

Mr. YATES. How will your additional leasing program help eliminate the smog over Denver?

Mr. CARRUTHERS. We will move the population out of Denver into Rifle, Colorado.

Mr. BURFORD. There is one serious part of that though, Mr. Yates. Nahcolite and dawsonite are two of the associated minerals present in oil shale. Nahcolite is a mineral which is coming into great demand for use in stacks for removal of impurities in coal smoke.

Mr. YATES. Are you going to have to worry about losing clean air over our national parks in Colorado as a result of your leasing program?

Mr. BURFORD. No, sir.

Mr. YATES. Oil shale will not do it?

Mr. BURFORD. I do not believe so, sir. The closest park would be Rocky Mountain National Park.

The prevailing winds are from the west.

Mr. **Yates**. What about Colorado Springs.

Mr. **Burford**. Garden of the Gods.

Mr. **Yates**. That is far away?

Mr. **Burford**. Yes.

Mr. **Yates**. What are you going to do in Utah where you have so many national parks, what was the name of that development, Kaiparowits, is that under consideration again?

Mr. **Carruthers**. For coal leasing? It is always under consideration for coal leasing. The issue was a transportation problem and some environmental problems. But the oil shale is more in the east and central part of the State.

Mr. **Yates**. But they gave that up because of all the trouble. Are you going to move into all the western States?

Mr. **Carruthers**. On oil shale?

Mr. **Yates**. All your leasing programs.

Mr. **Carruthers**. Oil shale is Colorado, Wyoming—geothermal is somewhat isolated.

Mr. **Yates**. Educate me. What is the result of the oil shale process? Does the producer have to worry about polluting the air?

Mr. **Burford**. Yes, any refinery does that.

Mr. **Yates**. I know you do in oil and gas.

Mr. **Burford**. There are problems with air quality, yes.

Mr. **Yates**. With oil shale, you would, too?

Mr. **Burford**. Yes.

Mr. **Carruthers**. The product of retort is an ash that is very light and can be moved quite far by the prevailing winds.

Mr. **Yates**. Can you provide for the record what is likely to happen to the atmosphere as a result of the oil shale program, and have you considered it in the states in which you propose to enter into oil shale leases?

[The information follows:]

Effect of Oil Shale Program on Atmosphere

Because most of the oil shale region is meeting current National Ambient Air Quality Standards (NAAQS) for regulated pollutants, Prevention of Significant Deterioration (PSD) permits will be needed. Regulated pollutants include, but are not limited to, Total Suspended Particulate Matter (TSP) and Sulfur Dioxide (SO_2). Presently, most of the oil shale region is labelled Class II, although some Class I areas, such as the Flat Tops Wilderness, are affected.

The Environmental Protection Agency (EPA) published estimates of ambient air concentrations from a generic 50,000 barrels per day (BPD) oil shale facility. EPA concluded that single plants would not violate the PSD increments for SO_2 or TSP, nor would they cause a violation of the NAAQS for the other criteria pollutants. Several studies have attempted to gauge the air quality budget available to a prospective oil shale industry. These models assume retention of existing Clean Air Act standards and area classifications (i.e., I, II, or III). Obviously, air quality modeling is a dynamic process and requires frequent reassessment to consider new developments (e.g., power plants) since the original studies.

EPA's most recent estimate concluded that a 400,000 BPD industry could fit within the 24-hour increment of SO_2 (in western Colorado).

The National Commission on Air Quality concluded that 940,000 BPD of oil shale could be produced within PSD budgets in Colorado and Utah, including 670,000 BPD in the Piceance Basin.

Other provisions of the Clean Air Act have yet to be applied to oil shale facilities, including New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAPs). Acid rain impacts are also currently being assessed.

Mr. CARRUTHERS. The prototype oil shale program under way right now is probably the best monitored of the leasing programs we have ever had in BLM. We can offer, I think, some pretty good evidence as to impact to date.

TAR SANDS DEVELOPMENT

Mr. YATES. Do you expect the tar sands leasing to go ahead with development of tar sands?

Mr. CARRUTHERS. Yes.

Mr. YATES. I thought it was such a difficult operation. You do not have the strip mining operation as you do in Canada for tar sands, but you have to deep mine this, I am told. But they are still going to go ahead with it?

Ms. BLACKSTONE. There are various technologies for recovery of tar sands. I am sure it depends upon the specific area as to which type would be applied.

Mr. YATES. Is there an area that you can strip mine tar sands?

Ms. BLACKSTONE. I am not sure. We would be happy to find out if any of the areas are suitable for strip mining.

Mr. CARRUTHERS. There have been limited interests in the conversion. I would assume they are wanting to go ahead.

PLANS FOR TOMORROW'S HEARING

Mr. YATES. I think we will start tomorrow morning with page 43 on energy offshore.

Mr. BURFORD. What time, sir?

Mr. YATES. 10 o'clock, unless you want to make it earlier. That will give you a chance to get some work done in your office first. Then you can come in and we will continue.

Thank you very much.

TUESDAY, MARCH 30, 1982.

BUREAU OF LAND MANAGEMENT (continuation)

WITNESSES

ROBERT BURFORD, DIRECTOR, BUREAU OF LAND MANAGEMENT

JAMES PARKER, ASSOCIATE DIRECTOR, BUREAU OF LAND MANAGEMENT

DELMAR VAIL, DEPUTY DIRECTOR FOR LANDS AND RENEWABLE RESOURCES, BUREAU OF LAND MANAGEMENT

SANDRA BLACKSTONE, DEPUTY DIRECTOR FOR ENERGY AND MINERAL RESOURCES, BUREAU OF LAND MANAGEMENT

ARNOLD PETTY, DEPUTY DIRECTOR FOR MANAGEMENT SERVICES, BUREAU OF LAND MANAGEMENT

ROGER HILDEBEIDEL, CHIEF, OFFICE OF BUDGET, BUREAU OF LAND MANAGEMENT

JOSEPH W. GORRELL, DIRECTOR, OFFICE OF BUDGET, OFFICE OF THE SECRETARY

ENERGY OFFSHORE

Mr. YATES. Mr. Reporter, show the hearing as coming to order. Energy offshore, page 43 of your budget justification. Secretary Watt announced a very large oil and gas leasing program. That is now scaled down.

What is your plan now, as far as leasing the OCS is concerned? How big is it, and how much do you think you will be doing?

Mr. BURFORD. With the deletion, the total is about a billion acres.

Ms. BLACKSTONE. One sale was deleted, but the acreage to be offered is still approximately a billion in terms of the call for information. That will not necessarily be the proposed action. That is determined later as far as the actual lease areas to be offered, but the initial call will cover approximately 200 million acres per year under the new 5-year schedule.

Mr. YATES. Can you handle that much?

Mr. BURFORD. Yes, sir.

Mr. YATES. What about the two most recent sales in the Atlantic and Gulf? On what percentage of available tracts was there bidding?

Ms. BLACKSTONE. I don't have those numbers, but we can supply them.

Mr. YATES. All right, would you also supply the comparable figure for the 1981 sales?

Mr. BURFORD. Yes, sir, we will.

[The information follows:]

PERCENTAGES OF TRACTS BID ON IN RECENT SALES

Sale	Date	Number of tracts		Percent of tracts bid on
		Offered	Bid on	
66, Gulf of Mexico	October 1981	209	107	51
59, Mid-Atlantic December 1981	December 1981	253	98	39
67, Gulf of Mexico	February 1982	234	137	59
Fiscal year 1981 sales:				
55, Gulf of Alaska	October 1980	210	37	18
62, Gulf of Mexico	November 1980	81	74	91
53, California	May 1981	111	81	73
RS–1, Gulf of Alaska	June 1981	175	5	3
A66, Gulf of Mexico	July 1981	212	162	76
56, South Atlantic	August 1981	285	54	19
60, Lower Cook Inlet	September 1981	153	13	8

Mr. YATES. Do you remember how the bids compared to the estimates?

Mr. BURFORD. We can get that information for you. I do not recall exactly what that was. I do know that the one tract that was bid on got the highest ever bid. They announced that Chevron spudded a wildcat on that yesterday.

Mr. YATES. Spudded? Is that a technical phrase?

Mr. BURFORD. That means they have started drilling.

[The information follows:]

TOTAL BONUS BIDS

Sale	Estimated	Actual
66	$800,000,000	$1,200,000,000
59	4,600,000,000	424,000,000
67	900,000,000	1,300,000,000

Mr. YATES. Where is that located?

Mr. BURFORD. It is located just off the coast of California.

Mr. YATES. Off the coast of California. The northern coast of California?

Mr. BURFORD. No, the southern coast—Santa Barbara. Guesses are that the well they hit there shortly before that last offering was a tight hole. There is very little information out on it, but because of the way they bid, industry estimates it may have been one of the biggest strikes on the OCS. What was the total amount of their bid, $300 and some million?

Ms. BLACKSTONE. Our highest bid has been $331 million.

ENVIRONMENTAL IMPACTS

Mr. YATES. Should we be concerned about the impact on the environment of your greatly increased proposal?

Mr. BURFORD. We are always concerned about the impact on the environment. We have environmental studies continuing in every area we are going to offer for sale. Those environmental impact studies start out on a basinwide concept and narrow down through the tiering concept so that we get to site-specific impacts.

Mr. YATES. Do you have to worry about spillages? There has been a National Academy of Science study to the effect that 57,000 barrels of oil and 300,000 tons of drilling fluid, 10 million tons of drilling cuttings were discharged into the sea between 1975 and 1978. Of course, that preceded your coming on board, but the scientists have said that the effects of the discharges haven't been adequately researched.

What happens now? Here is Chevron coming along at Santa Barbara. Of course, Santa Barbara had a terrible experience with, what was it, a break in the surface, a leak?

Mr. PETTY. It was a well blowout.

Mr. YATES. Is that whole area under control now?

Mr. BURFORD. We feel that it is. When you look at those cutting fluids going off into the billions of gallons of water that are contained in the ocean, you cannot locate any perceptible change in seawater one mile from any of those drilling platforms.

Mr. YATES. Well, it would be understandable if they went out in the ocean, but suppose they come toward the beach with the tides.

Mr. BURFORD. The effect would still be minimal.

Mr. YATES. Really?

Mr. BURFORD. You can watch that plume. It just disappears. You cannot find traces of it because we can't measure down far enough in the particles in dilution and find those particles very far from the drilling itself.

Mr. YATES. We will accept that. But you don't mind if we still are concerned?

Mr. BURFORD. Mr. Yates, we are all concerned. We have instructions from the Secretary that environmental concerns are to be one of our primary concerns.

Mr. YATES. Well, the environmental concern in this case is the impact on the oceans. The scientists at Woods Hole Oceanographic Institute—a good institution—say that there are indications that marine life is going to be severely affected by the hydrocarbons.

I wonder what the effect on the fish is likely to be.

Mr. PETTY. Mr. Chairman, in recent years there has been a large improvement in the recycling of the drilling mud. The drilling mud is brought back on the platform and cleaned and reused to a large extent. That which cannot be reused is shunted down through a pipe directly to the ocean floor so that there is very minimal discharge.

When it gets down close to the ocean the spread is very, very small as the Director is pointing out. A mile away you absolutely cannot find any because it lies close to the ocean floor.

Mr. YATES. We will watch.

LITIGATION

Are there likely to be any new legal challenges to your plan? When it was originally announced I think somebody filed suit against it, didn't they?

Ms. BLACKSTONE. No, there was ongoing litigation on the Andrus 5-year schedule.

Mr. YATES. Nothing on the Watt 5-year schedule?

Ms. BLACKSTONE. That litigation was ongoing, and we received an order on the provisions relating to section 18. Those concerns of the court were accommodated in the 5-year program supplemental EIS that was published earlier this month.

Mr. YATES. You don't know of any legal challenges that are pending other than that one suit?

Ms. BLACKSTONE. The court retained jurisdiction in that suit and said that one can be considered to be still pending. We have no way of telling if we will receive additional challenges.

Mr. YATES. Has the State of Alaska given you any objections to the plan?

Ms. BLACKSTONE. Not that I know of. The State of Alaska's concerns were accommodated.

Mr. YATES. Did that precede the dropping of the sale?

Mr. BURFORD. No, it did not.

Mr. YATES. How are you getting along with the Governor of Alaska?

Mr. BURFORD. I was up there a couple of weeks ago and talked to the Lt. Governor. He was not voicing any violent concerns at that time.

Mr. YATES. Maybe he doesn't talk to the Governor. That newspaper article indicates——

Mr. BURFORD. I suppose that is always a possibility.

Mr. YATES. Yes. That newspaper article would indicate that the Governor was a little concerned.

Mr. BURFORD. He is not responding in detail as he has said that he would. We will be watching for his response.

FIVE-YEAR SCHEDULE

Mr. YATES. What are your current estimates for staffing and funding of the 5-year program?

Ms. BLACKSTONE. We have requested an increase of 55 positions for fiscal year 1983 to accommodate the revised schedule, which does include doing environmental assessments on larger areas. The work involved in the lease management functions is labor intensive.

Mr. YATES. Has that cleared OMB?

Ms. BLACKSTONE. Yes, it has.

Mr. YATES. Okay.

Ms. BLACKSTONE. Our total staffing in FTE's would be 343.

Mr. YATES. What are the various methods you are using for putting the bids out? Are they all bonus bids? Do you have any other kinds of bids that you are using?

Ms. BLACKSTONE. Under the Outer Continental Shelf Lands Act, we are required for a period of time to offer at least 20 percent of the tracts by alternative bidding systems. That is, different from straight bonus bidding.

So, we have been carrying out a program of experimentation with other types of bidding systems including net profit share and——

Mr. YATES. Where have you had net profit share?

Ms. **Blackstone**. We have used it in a number of different sales. And I believe both in the Gulf and in the Atlantic sales. We would be glad to supply specific details.

Mr. **Yates**. I think those ought to go into the record. I think we ought to have a breakdown of how your bidding is proceeding by bonus, by profit sharing, and by any other systems you may be using.

Ms. **Blackstone**. We will furnish that information.

[The information follows:]

ALTERNATIVE BIDDING SYSTEMS

The following table contains a record of the use of bidding systems other than the conventional cash bonus bid, fixed 16⅔ percent royalty system. The cash bonus bid, 12½ percent royalty and cash bonus bid 33⅓ percent royalty systems which are included in the table are not considered alternative systems under the OCS Lands Act. Since passage of the act, 35 percent of the tracts offered have been alternative bidding system tracts.

RECORD OF EXPERIMENTATION BY BIDDING SYSTEM TYPE AS OF MARCH 1982 [1]

Bidding system	Sale name, area, and date
Royalty bid, fixed cash bonus	Sale 36, Central GOM, Oct. 16, 1974. Sale CI, Lower Cook Inlet, Oct. 27, 1977.
Cash bonus bid, fixed 33⅓ percent Royalty	Sale 35, Southern California, Dec. 11, 1975. Sale 40, Mid-Atlantic, Aug. 17, 1976. Sale A62, Central GOM, Sept. 30, 1980. Sale 62, Western GOM, Nov. 18, 1980. Sale 53, California, May 28, 1981.
Cash bonus bid, sliding scale royalty:	
Sliding scale formula 1	Sale 43, South Atlantic, Mar. 28, 1978. Sale 45, Central & Western GOM, Apr. 25, 1978.
Sliding scale formula 2	Sale 65, Eastern GOM, Oct. 31, 1978. Sale 51, Central & Western GOM, Dec. 19, 1978. Sale 48, California, June 29, 1979. Sale 58, Central & Western GOM, July 31, 1979. Sale 58A, Central & Western GOM, Nov. 27, 1979. Sale BF, Beaufort Sea, Dec. 11, 1979.
Sliding scale formula 3	Sale 49, Mid-Atlantic, Feb. 28, 1979. Sale 42, North Atlantic, Dec. 18, 1979.
Sliding scale formula 4	Sale A62, Central GOM, Sept. 30, 1980. Sale 62, Western GOM, Nov. 18, 1980.
Sliding scale formula 5	Sale 55, Gulf of Alaska, Oct. 21, 1980.
Sliding scale formula 6	Sale 53, California, May 28, 1981.
Cash bonus bid, fixed Net profit share	Sale A62, Central GOM, Sept. 30, 1980. Sale 55, Gulf of Alaska, Oct. 21, 1980. Sale 62, Western GOM, Nov. 18, 1980. Sale A66, Central & Western GOM, July 21, 1981. Sale 56, South Atlantic, Aug. 4, 1981. Sale 60, Lower Cook Inlet, Sept. 29, 1981. Sale 66, Central GOM, Oct. 20, 1981. Sale 59, Mid-Atlantic, Dec. 8, 1981. Sale 67, GOM, Feb. 9, 1982.
Cash bonus bid, fixed 12½ percent Royalty	Sale 56, South Atlantic, Aug. 4, 1981. Sale 59, Mid-Atlantic, Dec. 8, 1981.

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[1] Bidding systems other than the traditional cash bonus, fixed 16⅔ percent royalty systems.

OCS STUDIES

Mr. **Yates**. In the middle of page 46 of your justification you say, "The program will not support studies to collect specific information which can be provided by the lessee." What does that mean? You go on to say, "including specific geologic permafrost hazards, sea ice stress and cultural resources." Suppose they don't do it?

Ms. **Blackstone**. The stipulations in the lease would require them to supply that kind of information prior to approval of further permits.

Mr. **Yates**. Before granting of further permits. Suppose they don't want further permits. You won't have the information, will you?

Ms. **Blackstone**. For example, prior to granting a drilling permit which they would have to have——

Mr. **Yates**. This is your procedure? You enter into the lease, and at some later time, you propose giving them a drilling permit. The drilling permit follows the lease?

Ms. **Blackstone**. Yes.

Mr. **Yates**. Before you grant the drilling permit you will require them to furnish you with the site-specific geologic and permafrost hazard data, right?

Ms. **Blackstone**. Yes, where that type of information is appropriate. But these requirements would be contained, again, if it is appropriate, in the lease stipulations.

Mr. **Yates**. "Sea ice stress and cultural resources". That, of course, refers to the cold waters. What do you require them to furnish you with in the Gulf permits?

Ms. **Blackstone**. In the Gulf of Mexico?

Mr. **Yates**. Yes, where you go to lease on the Gulf area.

Ms. **Blackstone**. If any of those would be appropriate, it most likely would be primarily concerned with geohazard types of conditions, potentially, if there are unstable bottom conditions.

Mr. **Yates**. Do you have the same procedure there? You give them the lease first, then before you give them a drilling permit you require the information to be furnished?

Mr. **Burford**. Yes, sir. The Gulf of Mexico is a little different because of the quantity of knowledge that has been gathered in the Gulf over the years. It is very well mapped, and a lot of information has been collected in the Gulf of Mexico areas because of extensive leasing that has taken place in that area.

Mr. **Yates**. What does your quantitative evaluation of the impacts of OCS operations on Georges Bank and Santa Barbara Channel involve? What do you mean by that quantitative evaluation?

Mr. **Burford**. Sandra, would you answer that question.

Ms. **Blackstone**. We have funded a number of different studies in both of those areas, and particularly in the Georges Bank to assess the impact on the fishing industry there. The word "quantitative" refers to the various aspects of the things we are studying, such as the effect of potential oil spills, the location and direction, the effect on the benthic populations and the sources of the environment that supports the fishing industry.

Mr. **Yates**. Was there any objection by State officials to your leasing, further leasing the Santa Barbara Channel?

Ms. **Blackstone**. Our next sale in that area will be Sale 68 in June of this year. I do not recall the State's comments. They have objected to leasing in northern California.

Mr. **Yates**. I know, but I wondered about the Santa Barbara Channel because of the blowout.

Ms. **Blackstone**. The Santa Barbara Channel contains both State and Federal lands. I do not think there are any Federal lands actually in the Channel. The State waters are within the 3-mile limit.

We have twice leased off of Santa Barbara in the Outer Continental Shelf area. I do not recall their specific comments on further leasing.

Mr. **Burford**. If there are objections, we can furnish that for the record.

[The information follows:]

CONCERNS OF THE STATE OF CALIFORNIA REGARDING TRACTS IN THE SANTA BARBARA CHANNEL AREA

A major concern, the offering of tracts near the Channel Islands National Marine Sanctuary, was addressed by deletion of 35 tracts from the proposal before the Proposed Notice of Sale was issued.

Other areas of concern are reflected in the state comments on the Proposed Notice of Sale as follows:

The state recommended deletion of eight additional buffer zone tracts in the area referred to as the Adjunct to the Santa Barbara Channel Ecological Preserve.

The state comments reiterated its concerns about virtually all areas with emphasis on: Oil spills; navigation and vessel safety; air and water quality; recreation and tourism; and commercial and sport fishing.

Mr. **Yates**. Your justification indicates that the costs of your OCS studies have been twice the amount that were estimated.

Does this mean that you should make more funds available for those?

Ms. **Blackstone**. I am not sure what you are referring to.

Mr. **Hildebeidel**. He is referring to the bottom of page 46.

Mr. **Burford**. Those criteria were established by BLM and OMB. They have been used since 1979. The criteria allow the prioritizing of the studies. We feel we are meeting environmental concerns by using those criteria for study project selection.

Ms. **Blackstone**. That reference in the justification is a comparison of the amount requested by the OCS offices compared to what has actually been spent. I think there is no end to the number of studies that could be done on the ocean, but we certainly have to consider budget constraints and what is necessary to support leasing decisions.

Mr. **Yates**. Is $200,000 the cost required to establish your present manual system of records, manuals and data storage?

Ms. **Blackstone**. I believe that is correct.

Mr. **Yates**. Will you complete this in 1983?

Ms. **Blackstone**. Yes, I believe so.

Mr. **Burford**. You are referring to record maintenance and data?

Mr. **Yates**. Yes.

Mr. **Burford**. I am not sure that would be a completion date, but we will find out.

Mr. **Yates**. All right.

[The information follows:]

OCS STUDIES RECORD MAINTENANCE AND DATA

This is an on-going system that will be implemented in fiscal year 1983 with the $200,000 but will not be fully funded and developed in one year. Additional equipment and operational costs will be incurred in future years as the system is operated on a continuing basis and retired and updated to meet current demands.

Mr. **BURFORD**. We are doing quite a bit of automating data at the present time.

Mr. **YATES**. Off the record.

[Discussion off the record.]

NONENERGY MINERALS ONSHORE

Mr. **DICKS**. All right. We will go now to non-energy minerals onshore.

On page 55, you are requesting $10.2 million for non-energy minerals, an increase of $500,000. On page 62, you are transferring the workload and responsibility for mining claims recordation from the lands and realty management activity to Mining Law Administration.

Do the positions to handle this workload also transfer, and if so, how many?

Mr. **BURFORD**. They were transferred, let's see if I can get that figure on how many.

Mr. **DICKS**. You can do that for the record.

Mr. **BURFORD**. Do you want that for the record?

Mr. **DICKS**. Yes.

[The information follows:]

MINING CLAIMS RECORDATION

A total of 63 positions will be transferred to the Mining Law Administration Program to handle the additional workload associated with responsibility for recordation of mining claims.

Mr. **DICKS**. Last year you intended to eliminate your backlog of mineral patent applications by 1983. Do you still plan to have the backlog eliminated by fiscal year 1983?

Ms. **BLACKSTONE**. Yes, that is still our plan.

Mr. **BURFORD**. I do not think we will have the backlog completely eliminated by 1983, but some of that backlog dates back 10 years. We are concentrating, at the present time, a great deal of our efforts on the backlog on oil and gas leasing. We have a task force working on this issue.

OIL AND GAS LEASING BACKLOG

Mr. **DICKS**. What backlog do you have on oil and gas leasing.

Mr. **BURFORD**. We went through that yesterday. I think all the information is in the testimony.

Mr. **DICKS**. Why don't you enlighten me since I was out in the great State of Washington yesterday. I was not here.

Mr. **BURFORD**. Has the primary started already?

Mr. **DICKS**. No. We were just out there working, seeing our constituents.

Mr. **BURFORD**. We have a total of about 14,000 considered to be the backlog in oil and gas leases. We have made a commitment to eliminate that 14,000 backlog by the end of calendar year 1982.

We do feel that that can be done. The elimination of the backlog is practically complete in a couple of States. We are making very good progress in the areas where the backlog is most serious one of which is the eastern States office. I talked to them yesterday morning. They are processing oil and gas leases at the rate of 40 a day at the present time.

New Mexico is another place where there is extensive backlog.

Mr. DICKS. These are people who are leasing land from the BLM and searching for oil and gas?

Mr. BURFORD. Yes, sir.

Mr. DICKS. We have 14,000 leases backlog?

Mr. BURFORD. Yes.

Mr. DICKS. They are not in the computer, or they are not recorded?

Ms. BLACKSTONE. They haven't been issued.

Mr. DICKS. I see.

Mr. BURFORD. Part of the backlog was caused by a moratorium on leasing. Another part of it was caused by the fact that military lands have just recently been opened up, causing a flurry of activity on some of those military lands.

Some of the military base commanders have not and will not allow leasing and are not processing the leases so that we can issue them. It is a matter of some concern to the Bureau, and that has been elevated to the Secretarial level by a letter from Secretary Watt to Secretary Weinberger.

Mr. DICKS. So, the moratorium on leasing, when did that start and when did it end?

Mr. BURFORD. The moratorium was instituted by Secretary Andrus in February, 1980.

Mr. PETTY. It ended in about June of 1980.

Mr. DICKS. That was because of fraud in the lottery system?

Mr. HILDEBEIDEL. Yes basically, that was the reason.

Mr. DICKS. How are we doing on that?

Mr. BURFORD. We gave a report on that yesterday. I will ask Arnold Petty to reiterate that report.

Mr. PETTY. The fraud investigation has been turned over to the Inspector General. There have been a number of convictions in that. They still have some pending, but there are a number of investigations going on right now. It is much lower, of course, than it was at the start. We think that has been pretty well cleaned up.

Mr. DICKS. People from BLM, were they indicted?

Mr. PETTY. No, there was no internal fraud involved. That was proven early on. The fraud consisted of multiple filings by the private sector in violation of regulations.

OIL AND GAS LEASING IN WILDERNESS

Mr. DICKS. All right. Are we doing any exploration or leasing on wilderness areas?

Mr. BURFORD. No, the Secretary issued a moratorium on any leases within wilderness areas.

Mr. DICKS. Until the year 2000?

Mr. BURFORD. That date, the year 2000, is in proposed legislation, sir. I do not know what the outcome of the proposed legislation will be. Actually, no leases have been issued in wilderness areas anyway; although there is the famous El Capitan lease where the lease extended past the boundary of the wilderness area. But there would be no exploration within the boundary. Any tapping of the resource under the boundary would be by slant drilling which has been perfected to the extent that they can——

Mr. **Dicks**. Just go right underneath the wilderness?

Mr. **Burford**. Drill here and go way over there.

MINERAL LEASING APPLICATIONS

Mr. **Dicks**. All right. How will you accomplish the processing of 144 mineral leasing applications in 1982 and 1983 compared to 40 actually proposed in 1981?

Ms. **Blackstone**. Are you referring to non-energy minerals leases?

Mr. **Dicks**. Yes, I think that is where we are. Non-energy minerals onshore.

Mr. **Hildebeidel**. He is referring to the table on page 64.

Ms. **Blackstone**. We do expect to increase that output. We have asked for a few additional people in that area, too. I believe it is seven or ten additional FTE's. We have proposed some revisions and streamlining that will allow us to significantly increase the issuance of leases.

Mr. **Dicks**. How many leases are currently in production? Have you taken any steps to address this situation?

Mr. **Burford**. I don't believe we have the figures on how many are in production.

Mr. **Dicks**. Put them in the record.

[The information follows:]

Nonenergy mineral leases

Currently there are 92 nonenergy mineral leases in production on public domain land and 32 on acquired land.

UNINTENTIONAL TRESPASS ACT

Mr. **Dicks**. Lands and realty management, on page 65. You are requesting $7.3 million for energy-related realty, an increase of $1.7 million. You were required under 43 U.S.C. 7122 to process, by last October, all applications for unintentional trespass filed under the act of September 26, 1968, sale of those lands as appropriate.

Did you meet the deadline?

Mr. **Burford**. Arnold, was that deadline met?

Mr. **Petty**. I am not aware of any backlog.

Mr. **Burford**. I am not either. I am assuming the deadline has been met.

Mr. **Dicks**. Would you put that in the record.

[The information follows:]

Unintentional Trespass

Section 214 of the Federal Land Policy and Management Act provided that all pending applications were to be processed within five years of the date of enactment. The Bureau processed all 470 applications involving 19,011 acres of land by the October 21, 1981 deadline.

ENERGY-RELATED REALTY PROGRAM

Mr. Dicks. If you did make it, tell us what was involved in making it, will you? Last year, you decreased the program on the basis of a shift in workload to nonenergy realty. This year you state the reduction reflects savings from reducing the cost to process a case from $2,350 in fiscal year 1981 to $1,640 in fiscal year 1982. Did the shift in workload not occur as you had anticipated?

Mr. Burford. We achieved the savings, but the number of applications picked up because of the requirements for more rights-of-way in connection with energy leasing. We still have a backlog and we are still working on it. Those requests for rights-of-way for transmission lines, distribution lines, et cetera, have dramatically increased. We expect that they will increase in the future. We have streamlined some of that process and were able to issue those permits in less time. But we are receiving more and more applications. We do feel we will be able to keep up with it.

One approach we have used is the designation of transmission corridors so that the area is already cleared. We are trying to confine pipelines, transmission lines, et cetera, into major corridors that have been environmentally cleared and where we can group them together. For some of the major pipelines, if further rights-of-way are needed, we will try to parallel the same corridor which has been cleared.

ETSI COAL SLURRY LINE

Mr. Dicks. Members of Congress from Wyoming recently criticized a BLM decision granting a right-of-way for a $3 billion coal slurry pipeline project. Has any further action been taken in this case?

Mr. Burford. The criticism was voiced originally by Senator Wallop. It was his interpretation of a news media story. The story was wrong, which is not unusual.

Mr. Dicks. I have to agree with you.

Mr. Burford. Immediately upon finding out his reaction, the State director in Wyoming contacted Senator Wallop and informed him of the correct decision on the pipeline. There was some problem in the State of Nebraska after that, because of a State constitutional provision which refused to allow ETSI to go through there. That line has been rerouted down through a corner of Colorado, and those rights-of-way have been granted.

Mr. Dicks. Is the project going forward?

Mr. Burford. It is going forward. It is not going forward with water from the Madison formation in Wyoming which was the original intent. Because of opposition from the Governor, the company is now importing water from a reservoir in South Dakota. They will be furnishing water as part of that grant of the right-of-way in South Dakota to 17 communities along that new pipeline right-of-way. They are not using the underground water in Wyoming. However, the ETSI rights-of-way grants have been issued; and that pipeline is ready to be constructed.

Mr. Dicks. Okay.

Mr. BURFORD. As I understand it from the company, they have arranged their financing. The coal is sold, and all systems are go on it.

SALE OF PUBLIC LANDS

Mr. DICKS. Your request for non-energy related realty is $12.7 million, an increase of $1.7 million.

Recently there has been a great deal of discussion regarding proposals to sell public lands to private interests—privatization. Have you been involved in developing proposals for the sale of BLM lands?

Mr. BURFORD. We are looking at what lands can be sold at the present time. Those reviews and inventories are confined to lands which could be sold under present legislation. Through the planning process the Bureau of Land Management does identify some lands which are appropriate for disposal, either because of the nature or location of the lands. For example, isolated tracts are difficult to administer because they are not contiguous to other public lands and because they are small areas. However, in the 1983 budget there are no requests for monies for the program to which you have referred because that program was announced after the budget figures were compiled.

Mr. DICKS. All right.

BLM LAND IN OKLAHOMA

Mr. BURFORD. In the State of Oklahoma, the Bureau of Land Management has approximately 8,000 acres with surface ownership, the largest piece of which is 160 acres in Oklahoma City.

Mr. DICKS. One hundred-sixty acres?

Mr. BURFORD. In the city limits.

[COMMITTEE NOTE.—Subsequent to the hearing, the Bureau of Land Management informed the Committee that the largest tract in Oklahoma is a 280-acre tract which is not located in Oklahoma City.]

Mr. DICKS. We asked the Secretary about this yesterday. He made a speech and said it was terrible we had land in Oklahoma and we ought to dispose of it, or something.

Are you going to dispose of it?

Mr. BURFORD. We are working on it. The BLM program in Oklahoma is handled out of our New Mexico State Office. We have an area office in Oklahoma City.

Mr. DICKS. Where is the property we own in Oklahoma City? Is it downtown property?

Mr. BURFORD. As I understand it, the parcels are vacant lots on the outskirts of Oklahoma City. I do not know the growth pattern of Oklahoma City, so its value——

Mr. DICKS. How did we get it in the first place?

Mr. BURFORD. When they homesteaded Oklahoma in the land rush, for some reason or another nobody claimed these particular pieces of land. They remained in Federal ownership, and this is true of all the other 8,000 acres in the State of Oklahoma except for some which are created by the meandering line of the Red River on the southern boundary.

The office is working on a plan for which the obvious conclusion will be that the land in Oklahoma City is to be sold because we can't afford to administer it. It would be better to give it to the State, or sell it to the State, or sell it into private hands because it is not efficient for us to manage it.

Mr. Dicks. You couldn't give it to the State, could you, unless it was for recreational purposes?

Mr. Burford. It would have to be R&PP, unless someone from Oklahoma got a bill through.

Mr. Dicks. That is not going to help us balance the budget, it is?

Mr. Burford. No, sir, I would be much more in favor of selling it and applying the money to the budget.

Mr. Dicks. I agree with you. I think if we are going to sell it, we ought to reduce our own budget deficit.

Mr. Burford. Instead of helping the State budget.

Mr. Dicks. Well, we have got a bigger deficit than they do.

Mr. Burford. Yes, sir.

Mr. Dicks. A lot bigger and it is getting bigger and bigger. Your request includes 3,160 land disposal cases in fiscal year 1983, up from 1,740 actual cases in 1981 and an estimate of 1,340 cases for 1982 in last year's budget.

What type of cases are included?

Mr. Burford. Some of those are probably under the Carey Act. Some are probably sales to adjoining property owners. Some are possibly under the R&PP Act, applications from communities and counties for school sites or hospital sites or various ways we can transfer lands to other municipalities.

I imagine some of them may be through selections in areas where the United States Government does owe States the right to select property. We have requests on file now for 960,000 acres under R&PP and selections such as that throughout the western States. These include a variety of requests under different laws.

Mr. Dicks. How much land, in total, will be involved over the 3-year period, 1981-1983?

Mr. Burford. I don't believe I could make that estimate. I will get that for you.

[The information follows:]

Land Disposal Cases

As used in the fiscal year 1983 Budget Justifications the term "land disposal" is the patenting of land through sale or other means of conveyance. Based on the end-of-year statistical reports, 166,000 acres were conveyed under the various land disposal authorities in fiscal year 1981. The acreage involved in cases which are planned for processing in fiscal year 1982 is approximately 193,000 acres. In fiscal year 1983, the figure is 150,000 acres.

Fiscal year:	*Acres*
1981 (actual)	166,000
1982 (estimate)	193,000
1983 (estimate)	150,000
Total	509,000

Mr. Dicks. How many acres for State in lieu selections are included at the proposed level? Put it in the record.

[The information follows:]

State in Lieu Selections

We estimate that we will convey 120,000 acres (excluding Alaska) to the States under the State indemnity selection program in fiscal year 1983.

Mr. **Burford**. We have that. We have almost completed Arizona. Utah is one state where there is a lot left to do. In some of the desert land or Carey land, there may be a change under the Act. Those are $1.50 an acre at the present time.

We are looking carefully at that with the idea that perhaps that land should be auctioned off if water is available to irrigate it. It should be auctioned off with a commensurate return to the Federal Treasury of actual value of the land.

DECISION PROCESS FOR LAND DISPOSAL

Mr. **Dicks**. Describe the process you follow with deciding on the disposal of BLM lands.

Mr. **Burford**. We have the regular planning process which is mandated by FLPMA. We prepare a plan for an area. There are certain of those lands that will be identified for retention under Federal management because that obviously is their highest and best use, while in some instances, isolated tracts sitting out of the way of anything else will be identified as best for disposal because they just don't lend themselves effectively to management. We don't even know where some of them are. We have problems——

Mr. **Dicks**. Aren't they pretty hard to dispose of if you don't know where they are?

Mr. **Burford**. We can locate most of them and will locate them and dispose of them. But they are hard to keep track of. I think there are some in your State. There is a good possibility there is unauthorized use of lands in your State that we don't know about, because it is impossible to control all that land and make sure that nobody is squatting on it.

Mr. **Dicks**. Sure.

FIREWOOD PROGRAM

What are you doing on your lands where you have timber? Are people coming in and getting firewood?

Mr. **Burford**. We have a firewood program, yes.

Mr. **Dicks**. Tell me a little about that.

Mr. **Burford**. We are identifying areas where people can go and pick up a permit and go out and get free use firewood. I think it is a dollar for a permit, isn't it?

Mr. **Petty**. In a good many areas it is free use. That is where the district manager has to make the determination of whether we can get something for it, or if it is better to put it up for free and have the public go out and clean it up.

By giving a permit rather than just a general announcement that wood is available, he has some control over who is there and where they are going. But the firewood program has mushroomed the last few years. In areas where we didn't even think we had timber, we have a firewood program. Mesquite wood makes good firewood. The demand has mushroomed.

Mr. Dicks. I would like to know if there is anything going on in the State of Washington in that respect.

Mr. Hildebeidel. We manage 311,000 acres, I think, in Washington out of the Spokane District.

Mr. Dicks. Over on the eastern side.

Mr. Hildebeidel. The land is spread throughout the State, but most of it is on the east side.

Mr. Dicks. The Forest Service manages a lot of land too?

Mr. Burford. Yes, they do.

Mr. Petty. I do not know the particulars on the firewood program in the State of Washington, but a little of that land is timber. There has to be a firewood program in the State of Washington.

Mr. Burford. We can provide the information.

Mr. Dicks. Just for the record. I am interested in that because the way our economy is going out there, we may have a lot of people looking for firewood next winter.

[The information follows:]

BLM's Firewood Program in Washington

BLM's firewood policy is as follows: Firewood is to be made available by (1) sale to private individuals and commercial operators at fair market value, as defined by the dollar value that a commercial operator would be willing to pay for the material; or (2) nonsale disposal through free use to private individuals for personal use when it has no market value, or (3) nonsale disposal through free use to governmental units, nonprofit organizations, certain mining claimants, and residents of Alaska regardless of whether the material has market value.

The Spokane District offers permits for private use of firewood in the State of Washington. These permits allow firewood gathering on district land thereby promoting energy efficiency and reducing the forest fire hazard at the same time. Since 1978 the Spokane District has issued over 350 firewood permits. The following table displays firewood activity since 1978:

Fiscal year	County	Number of sales	Volume (cords)	Value	Type
1978	Stevens	83	415	Free use	Firewood.
1979	do	123	615	do	Do.
1980	do	61	305	do	Do.
1981	do	70	350	do	Do.
1982	do	[1] 19	95	do	Do.

[1] Ytd.

LAND EXCHANGES

Mr. Dicks. Last year Utah proposed to exchange 4 million State acres for parcels of Federal land worth two to five times as much, using non-traditional valuation to make the exchange an equal one.

What was the outcome of that proposal?

Mr. Burford. That proposal is still being worked on. We had a letter from the Governor of Utah a couple of weeks ago. We are pursuing methods of evaluation. He is trying to lock up not only in lieu lands but State selections. There are some problems with evaluations especially in the subsurface areas. But we are continuing to work on it.

Mr. Dicks. What can you do legally? Can you exchange lands where the Federal land worth is substantially more than the State land is worth? I mean, doesn't there have to be some equality there?

Mr. **Burford**. Yes, sir, there does. There is more flexibility in in-lieu selections than in State selections.

Mr. **Vail**. It has to be equal value.

Mr. **Dicks**. What is a State selection for the record?

Mr. **Burford**. In the various western States, according to each one's Statehood Act, the State was granted either two, or four, or in the case of Alaska, more sections per township as State lands. This was Federal land to be transferred to the States. Utah happened to get four sections per township. Then, if later on, the Federal Government came along and declared a national park or something which encompassed some of those State acres, then it was up to the Federal Government to allow the State to select a commensurate amount of acreage in some other area of the public lands.

There is greater flexibility as far as value for in lieu selections is concerned; but in some of the areas where we are trying to block up lands and where some of the States would like to block up their State lands, we have to stick pretty close to equal value. Sometimes equal value is very difficult to ascertain when you start trying to look underground and see what is there.

Mr. **Dicks**. Yes. Is the Governor pushing you pretty hard on this?

Mr. **Burford**. It is a very active program. We are trying to respond to him, and we are working back and forth with various proposals and counterproposals to meet his request.

Mr. **Dicks**. What is this non-traditional valuation? What is that all about?

Mr. **Burford**. There have been several ideas proposed. One is that you trade similar lands for similar lands. Another proposal we are looking at is that in as much as the States do receive 50 percent of the mineral royalties off of Federal lands, we look at whether we could exchange the subsurface values. Half of them would go with the State, and half of them would be left with the Federal Government. It would be a take-your-chance attitude and allow the surface owning Agency to administer the minerals. The State would be getting 50 percent of the minerals on the Federal land.

They would be getting all the minerals on the State's half ownership. In essence they would get 75 percent minerals and royalties on that particular piece, and on the piece they traded into they would be getting 75 percent.

There is another proposal from Wyoming which is a new type of proposal. Wyoming has some land within Teton National Park on which they own surface and minerals. They are proposing an exchange there for some lands where the State owns the subsurface and the Federal Government owns the surface. The State has the mineral rights. The Federal Government has the surface rights. They would like to exchange total ownership of the land that they own within Teton to the Federal Government for an extensive area where the State owns minerals, and the Federal Government owns the surface, which would relieve the areas of conflict, especially in coal leasing.

It is a proposal that has just been made by Governor Herschler within the last weeks, and it sounds as if it might be a good proposal. We have to take a look at the values involved, but it would remove potential conflict in the years to come, as a result of the problems with different surface ownership and subsurface ownership, especially in the coal areas.

Mr. **Dicks**. Well, is the bottom line are we going to try to follow the Federal law here?

Mr. **Burford**. Yes, sir. We not only try to follow the Federal law, we have to follow the Federal law. We can't do anything else; but if the law is changed, we will follow the changed law.

Mr. **Dicks**. Let's just read a little here. "Interior considered changes to trading land with western States. Secretary James G. Watt has agreed in principle to Utah's proposal outlined February 18, in a memorandum from Governor Scott Matheson. Under it the State would offer up to 4 million scattered acres of now useless land. Utah would receive large useful parcels of Federal land worth two to five times as much.

"On the face of it, such an exchange would violate Federal law which requires a dollar for dollar swap, but Utah has proposed a creative redefinition of how these transactions are done. According to the State Natural Resources Director, James Butler, Utah's land would be assigned non-traditional values to make the exchange equal.

"Congress would have to determine whether the package is balanced. Such a decision would set precedence for future trades in other States with similar land management problems. 'Non-traditional values,' Butler said in an interview, 'include gains Utah has not been able to realize from patches of land it owns, but cannot use within large Federal spreads, such as parks, military reservations and wilderness study areas.'

"The state has lost money in over a decade of delay in settling land debts. Under this proposal the income would be collected from the Feds in land." It is an in lieu proposal isn't it? Instead of paying taxes we are going to give them land for having these defense bases and parks, is that the idea?

IN LIEU SELECTIONS

Mr. **Burford**. Some of those are in-lieu selections. Would you read the masthead? What are you quoting from?

Mr. **Dicks**. The Post.

Mr. **Burford**. The Washington Post?

Mr. **Dicks**. Yes.

Mr. **Burford**. Oh, well, I generally get my information and base my assessments on the law that I read. Interpretations of reporters are sometimes open to question.

Mr. **Dicks**. Sure. We just want to get the law and facts. That is why we are asking you about it.

Mr. **Burford**. We can exchange lands only under the laws that exist at the time we make the exchange. We are willing to look at, as that says, new ways of exchanges; but those new ways of exchanges have to fit within the laws under which we operate.

Secretary Watt has repeatedly said that we will operate within the law. He has never given me any instructions to operate any other way but within the law.

Mr. **Dicks**. I would hope he wouldn't.

Mr. **Burford**. I took an oath of office just the same as you did, sir.

Mr. **Dicks**. Sure. It is interesting. It looks like this is a new way of quelling the Sagebrush Rebellion. But as long as you tell us that you are not giving away our property——

Mr. **Burford**. I can assure you that we will not give away the property of the United States.

Mr. **Dicks**. All right, good.

Last year you estimated you would accomplish 2,220 land tenure adjustments in 1982. What is the basis for change in workload measures showing 150 in 1982 and 90 in 1983?

Mr. **Burford**. Del, are you familiar with that?

Mr. **Vail**. No.

Mr. **Burford**. I will have to find that out. I am not familiar with the reason for that figure. I will give it to you for the record.

[The information follows:]

Workload Measures for Land Tenure Adjustments

The 1982 Fiscal Year Budget Justifications categorized non-energy lands casework into two categories: land use authorizations and land tenure adjustments. The term land tenure adjustment included all forms of title transfer; sales, exchanges, State indemnity selections, Native allotments, etc. As a refinement, the fiscal year 1983 Budget Justifications added land disposals as a third major workload element. Land tenure adjustments were redefined and are now limited to "the exchange of land with a non-Federal property owner, or the adjustment of boundaries with other Federal agencies." Land disposal is "the patenting of land through the sale or other conveyance authorities such as the Desert Land Act." In order to make a comparison between the fiscal year 1982 and fiscal year 1983 Budget Justifications, land disposal and land tenure adjustment cases estimated for fiscal year 1982 in the fiscal year 1983 Budget Justifications must be added together.

	Cases
Fiscal year 1982 budget justifications: Land tenure adjustments	2,220
Fiscal year 1983 budget justifications:	
Land tenure adjustments	150
Land disposals	2,262
Total	2,412

The definition and use of the term "Land Use Authorizations" remains unchanged.

NAVAJO-HOPI EXCHANGE

Mr. **Dicks**. Well, all right. Is there any funding in 1983 for the Navajo-Hopi land selections? What is the status of BLM's participation in this activity?

[The information follows:]

Funding for Navajo-Hopi Exchange

The Arizona State Director has established an office in Flagstaff, Arizona with a staff of seven to carry out BLM's responsibility in connection with the relocation project. In fiscal year 1983, BLM is estimating the transfer of 50,000 acres. The total proposed operating budget for fiscal year 1983 is $350,000. This same funding level is contained in the fiscal year 1982 budget.

Mr. **Burford**. There are 250,000 acres involved in the land transaction. We will be working with the Navajo and Hopi, the Bureau of Indian Affairs and Navajo Tribe in carrying out this act. We are continuing to work with them at the present time.

Mr. **Dicks**. What are you doing?

Mr. **Burford**. Well, they have certain selections that they can make, and the ball is in their court. Actually, it has been confused a little bit by the fact that if they don't make their selections by a certain time, there is a commission which has been appointed which takes over and makes their selections. That commission is actually not legally constituted to handle land exchanges at the present time, but they do seem to be making some noises. I would say they are clouding the issue a little bit right now by being premature in some of their statements.

It is an ongoing program. We are working on it.

ALASKA LANDS PROGRAM

Mr. **Dicks**. $11.9 million, an increase of $1.6 million, is requested for the Alaska programs, primarily to process an additional 2,380 native allotments out of 7,000 pending.

Mr. **Petty**. I do not think we have a date to complete that. The big problem we have with the allotments is that the legislative allotments that occurred a few years ago created a huge backlog. The surveying in there is a big, big problem. We are trying to provide funds to make those surveys.

Mr. **Burford**. One of the main problems with the native allotments is the fact that they cloud our title and inhibit our ability to transfer lands to the State of Alaska and to the Native corporations. We plan to complete these in 3 years.

Mr. **Dicks**. In 3 years you will get it done?

Mr. **Burford**. That is our goal.

Mr. **Dicks**. Could you increase your level of effort if we gave you more money?

Mr. **Vail**. No, sir.

Mr. **Burford**. I don't believe we could. I think the survey is the tough part of that. Some of the new surveys being used up there are very capital intensive because of the high cost of the equipment that is used. I looked at some new surveying machines which use inertial guidance systems and set themselves on one point and automatically track themselves. As one who grew up in the era of the compass and field transit, it is almost beyond understanding. Those things cost $600,000 for one of the smaller ones up to well over $1 million for some of them.

So, with utilization of that type of capital, I do not think we could really increase our speed.

FOREST MANAGEMENT

Mr. **Dicks**. Your request for Forest Management is $6 million, a decrease of $2.2 million. $1 million of the decrease will be for public domain lands outside of western Oregon and will be accomplished by targeting commercial timber management activities to the most productive areas.

Why won't this targeting have an impact on planned timber sale levels?

Mr. **Burford**. We have some areas where our sales of timber cost more money to sell than we actually get out of the sale. We are trying to reduce efforts in areas as far as commercial work is concerned where it does not really benefit the Treasury of the United States.

Those are the public domain lands; they do not refer to the O&C lands in eastern Oregon.

Mr. **Dicks**. What has been your experience to date with planned 1982 sales?

Mr. **Burford**. O&C or public domain lands?

Mr. **Dicks**. Both.

Mr. **Burford**. As far as returns are concerned they are down considerably.

Mr. **Dicks**. Because of the slump?

Mr. **Burford**. Yes, sir. I think you are probably quite familiar with that.

Mr. **Dicks**. I am exceedingly familiar with it.

Mr. **Burford**. Probably more familiar with it than you would like to be. I have been in Oregon. I have not been in Washington.

Mr. **Dicks**. It is grim. Why don't you give us a little profile for the record.

[The information follows:]

FISCAL YEAR 1982 (YTD) TIMBER RECEIPTS

All sales advertised so far in fiscal year 1982 have sold. Monthly averages are as follows:

Fiscal year 1982	Tracts	Volume (M bd. ft.)	Value	Bid ratio
October	15	40,678	$7,283,007	2.10
November	9	25,262	4,820,567	2.53
December	32	89,439	12,745,891	2.86
January	21	76,597	9,969,922	2.45
February	18	68,977	7,566,095	1.96
March	39	109,481	9,776,588	1.54
Total	134	410,434	$52,162,070	....

Mr. **Dicks**. Have you had many defaults?

Mr. **Burford**. Not yet. We put in a grace period of 3 months. I just extended that grace period for 90 days at the request of Senator Hatfield.

Mr. **Dicks**. Under your procedures, do they have to pay any interest charges? What do they pay, when you bid on a contract for BLM, do they have to make a downpayment?

Mr. **Vail**. No, they just post a bond. With the Forest Service, it is payment; but with us right now it is just a bond.

Mr. **Dicks**. Are you looking at changing that at all, in light of this?

Mr. **Vail**. We are increasing the bond. This is where we have a 3-year contract, a contract for a 3-year harvest.

Mr. **Dicks**. Instead of a 5-year or 7-year?

Mr. **Vail**. That is what the Forest Service had. Now, we are proposing to have short-term sales for a year, 2 years and so on.

Mr. **Dicks**. Well, it is a tough job. One side of it, you don't want to take people over the edge. But on the other side of it, you want to dampen the speculative bidding which has been going on and has put us at a competitive disadvantage.

[COMMITTEE NOTE.—Subsequent to the hearing, the BLM informed the committee that the grace period had been extended further until December 31, 1983. The letter follows:]

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

IN REPLY REFER TO:
5400 (130)

May 18, 1982

Instruction Memorandum No. 82-164, Change 1
Expires 9/30/82

To: All State Directors

From: Director

Subject: Extension of Grace Period for Timber Sale Contracts

In a speech before the National Forest Products Association yesterday, the Secretary of the Interior announced continuation of the grace period for all timber sale contracts involving forest lands administered by the Bureau of Land Management (BLM). The grace period will continue on all contracts executed prior to October 1, 1981, until December 31, 1983.

The action was a part of the continuing policy of the Reagan Administration to bring stability to the western timber industry. We share the desire to put people back to work in Oregon and in other areas where public domain timber is important to the annual timber harvest.

At the same time, the grace period will not affect those contracts sold after October 1, 1981. BLM has begun to offer timber under contracts of shorter durations than those affected by the grace period.

Robt F Burford

1 Enclosure:
Encl. 1 - Instruction Memorandum No. 82-164

Mr. BURFORD. We think that these 1-, 2- and 3-year sales will tend to eliminate some of the speculative bidding because on those 1-year sales especially, they have to bid those and get in and get the timber out.

We have been cooperating with the Forest Service. I think we had, what, 13 points?

Mr. VAIL. The Forest Service had 11 points. We adopted or coordinated on five.

Mr. BURFORD. They came closer to our system on five or six of them. We are trying to coordinate.

OREGON AND CALIFORNIA GRANT LANDS

Mr. DICKS. Tell me a little bit about the Oregon and California lands issue. Could you tell us a little bit about the background of this issue? I have always wondered why there was not a Washington, Oregon and California lands. I thought we must be missing out on something. I have always been worried about that.

Mr. BURFORD. California feels the same way.

Mr. DICKS. Tell me a little about that.

Mr. BURFORD. There are actually two parts. One is the Oregon and California Railroad which are lands that were granted to a railroad conditional upon the railroads being built.

The railroad was never built. Lands were reverted to the United States and are administered by BLM. They are administered under a separate law.

Mr. DICKS. How many acres are there?

Mr. BURFORD. Mr. Hildebeidel informs me that there are 2.2 million acres.

Mr. DICKS. How are they managed? Are the counties involved?

Mr. BURFORD. The county gets 75 percent of the income, and they return 25 percent to the BLM.

Mr. DICKS. That is different. Everything else is 50–50, isn't it?

Mr. PETTY. Let me give you a little more background on that. The railroads were supposed to sell off some of this land at the same time they were building. They got this huge block of land. At the same time, they are supposed to be paying taxes. They didn't pay the taxes. The counties came close to bankruptcy. They came to the Federal Government to get a bailout. The Federal Government agreed to advance the money for back taxes and to take the land back. It would then sell timber to recover the amount of the advance. That advance was finally paid off about 1951 as I recall.

Now, at that time, I started to say you recall, but maybe you don't recall.

Mr. DICKS. I can't say I recall that.

Mr. PETTY. The timber was bringing a very low price. There was a big debate as to whether or not the counties ought to take the land back and manage it. They really couldn't handle it. The timber just wouldn't bring in the money.

Mr. DICKS. So, how much is managed by BLM?

Mr. PETTY. BLM kept 2 million acres.

Mr. DICKS. 2 million acres? Is this in Oregon?

Mr. PETTY. It comes from the name of the Oregon and California Railroad. All the lands are located in western Oregon.

Mr. DICKS. Is this all in Oregon, western Oregon?

Mr. PETTY. Yes, and it is all very high-valued timberland.

Mr. DICKS. 2 million acres?

Mr. PETTY. 2 million acres.

Mr. DICKS. What do you think that is worth? What does an acre go for? What is the valuation of an acre of timber?

Mr. PETTY. I can recall an acre of standing timber selling for $35,000.

Mr. BURFORD. That is for the timber without the land.

Mr. PETTY. Yes, and I am sure that has gone up some.

Mr. BURFORD. Although it is little recognized, up until the Chevron bid last year, Outer Continental Shelf lands had not brought as high a bonus bid per acre as some of the O&C lands had.

Mr. PETTY. For the standing timber?

Mr. BURFORD. Which gives you an idea of what that is worth.

POSSIBLE TRANSFER OF O&C LANDS

Mr. DICKS. So you manage these 2 million acres? Have you ever thought about selling them?

Mr. BURFORD. We have thought about it. I do not know whether Mr. AuCoin would agree with you.

Mr. PETTY. The O&C Act provides that the lands will be managed by the Federal government under a sustained yield policy. So, should it be proposed, it would take legislation to do it. It could not be sold without legislation.

Mr. DICKS. So BLM has it now. It says here, "State may get Federal timberland." Here are these reports again, Mr. Director. I am sorry about it. But you know sometimes we in Congress get a lot of information from the press.

Mr. BURFORD. My problem, Mr. Congressman, is that sometimes that information is not as accurate as I would like you to have.

Mr. DICKS. I know that. That is why we try to go through these things with you so you can correct the record.

"United States Interior Department officials are exploring the possibilities of turning management of more than 2 million acres of Federal timberland in Oregon over to the State." It says 2-15-82, a rather current story. "Oregon State Forester Mike Miller said on Saturday", this is an AP story in the Gazette Times, Corvallis, Oregon, "potential transfer would involve 2.1 million acres of western Oregon land controlled by the Bureau of Land Management and formerly owned by the defunct Oregon and California Railroad.

"The Forest Service manages the other 500,000 acres of O&C timberland in Oregon." So, there is more. Two and a half million acres. "Interior Under Secretary Don Hodel said Friday the Department has not decided whether to recommend transfer of ownership or merely transfer of responsibility for managing the land. Word of the possible transfer which would require Congressional approval came during a visit Friday to Salem by National BLM Director Robert Burford. 'If there is any serious consideration of it, we will be making an analysis.' Burford said. Miller and Hodel said Interior Secretary James Watt had proposed the possible transfer two weeks ago in a meeting in Washington with Miller. The gist of Watt's offer, Hodel said, was perhaps what we ought to do is turn the responsibility for management over to the state and have the state pay the Federal government instead of vice versa.

"Governor Vic Atiyeh is advocating having the State own or manage some of the Federal land in Oregon, more than 50 percent of the State's land area. 'We are talking about it seriously, but no one has had a chance to explore the legal ramifications, Miller said. He said the offer will be studied after the special session of the legislature is over."

O&C TIMBER RECEIPTS

"Forest Service Chief Max Peterson said Saturday the Agriculture Department had not suggested that national forests be turned over to any state for management." The Forest Service is part of the Agriculture Department. Eighteen western Oregon counties expect to share $97 million this year from sale of timber on O&C land with Douglas, Lane, Coos, Jackson and Josephine getting the largest amounts.

In early 1978, Oregon counties shared $105 million in O&C timber receipts. Congress ceded millions of acres in the West to the Oregon and California Railroad in 1869. In 1915, Congress reclaimed 2.6 million acres in Oregon and in 1957, adopted the policy of managing the land for timber production. The counties get 50 percent of timber sale revenue. Twenty-five percent goes into the Federal Treasury and 25 percent goes to BLM. Is that right?

Mr. BURFORD. Well, the law as written, if I remember correctly, said 75 percent would go to the counties and 25 percent to the Federal Treasury. Under an agreement which was reached sometime later, the counties agreed to take 50 percent as their share and turn 25 percent over to the Bureau of Land Management for management purposes.

Mr. PETTY. The way that has worked is that the counties have never received the 75 percent that the O&C Act provides. The 25 percent difference between the 50 and 75 percent was used to pay off the loan that I spoke of earlier that the Federal Treasury paid to counties for the back taxes. That loan was finally paid off. The counties are now eligible to receive the 75 percent. But instead Congress put in the Appropriation Act, presumably with the permission of the counties, that the 25 percent would be used to manage the lands. That has continued up until 1982, the year we are now in.

When the timber receipts dropped so dramatically, the 25 percent just was not enough to handle that program. Congress last year gave us a direct appropriation, and again this year we are proposing that Congress make a direct appropriation in lieu of the 25 percent.

Mr. DICKS. Is that percentage based on the receipts, or is it out of the pot?

Mr. PETTY. Right out of the pot. What we have in 1982 and are proposing for 1983 is that 50 percent of the receipts go to the county.

Mr. DICKS. What do you anticipate the receipts will be in 1983?

Mr. BURFORD. Do you have a projection?

Mr. HILDEBEIDEL. Yes.

Mr. DICKS. Give me 1982 and 1983.

Mr. PETTY. The 1982 estimate is $220 million out of the O&C counties. The 1983 estimate is $232 million.

Mr. DICKS. That is what you expect for receipts?

Mr. PETTY. Those are the anticipated receipts.

[COMMITTEE NOTE.—Subsequent information provided to the Committee indicated the fiscal year 1983 estimate of $232 million in receipts was overstated, since fiscal year 1982 receipts will be off by as much as 60 percent from fiscal year 1981.]

Mr. DICKS. I don't understand what happened last year. You are saying last year the receipts weren't there because of the crisis.

Mr. PETTY. There are several things that are happening to us on the 25 percent. It is a month-to-month business. When you are trying to run a program with receipts, you are trying to estimate next month what your receipts are going to be in order to know what you can spend. Now, during the years when the receipts were going up rapidly that was no problem. We did build up rather large reserves which we carried over and spent. When receipts dropped, we got to the point where we didn't know from one month to the next whether we could have anyone on the payroll. We came to Congress with the proposal that there be a direct appropriation, whatever it happened to be. That was how we would justify the program as we did in 1982.

Mr. DICKS. I see, so BLM would get a direct appropriation?

Mr. PETTY. Yes, sir. The counties would get 50 percent of whatever the receipts were.

Mr. DICKS. So, we are not making a direct appropriation to the counties?

Mr. PETTY. No.

Mr. DICKS. That is what I was confused on. The only direct appropriation is for BLM land. Let's talk about Washington and California. Take us through this now.

Mr. VAIL. You are still talking about timber?

Mr. DICKS. Yes.

Mr. PETTY. This refers to the sale of land and material because material includes timber. The law reads five percent of net proceeds which has been interpreted, as far back as I can trace it, as meaning four percent of gross proceeds goes to the State, 96 percent goes to the Reclamation Fund in the reclamation States and general fund of the Treasury.

Mr. DICKS. So the counties don't get anything in Washington State?

PAYMENTS IN LIEU OF TAXES

Mr. PETTY. The counties get their money through payments in lieu of taxes. That is where the problem is.

Mr. DICKS. Go ahead. I want to understand this.

Mr. PETTY. The States do not always pass that money down, although they are free to do so. Some States pass more, some less.

So, the payments in lieu of taxes legislation came about as an effort to get direct payment to the counties.

Mr. DICKS. I understand that. And so what kind of a formula is there? Is there a formula based on receipts, or is that just a straight out appropriation?

Mr. PETTY. Payments in lieu of taxes is a direct appropriation.

Mr. DICKS. I am cognizant of it. I know some of our counties get some. But that is nothing to do with receipts.

Mr. PETTY. The payment in lieu of tax legislation provides a formula. Part of that formula is to reduce the amount the counties would be entitled to by the amount that the State passed through from receipts. If the States passed nothing through, receipts would not be a factor.

Mr. DICKS. It is based on how much land——

Mr. PETTY. It is based on land and population.

Mr. BURFORD. Do you want to get into Coos Bay Wagon Road?

Mr. PETTY. That is also Oregon, but it is a different law altogether.

Mr. DICKS. Do those Oregon counties that receive receipts under the Oregon and California, do they also get payments in lieu of taxes?

Mr. PETTY. O&C lands are not part of the entitlement lands. But those counties do have some public domain lands for which they do get payments in lieu of taxes. There is not much, but there is some.

Mr. BURFORD. They get PILT payments on public domain lands but O&C lands are exempted from PILT. There is another 500,000 acres in the Coos Bay Wagon Road which is also in Oregon that is a similar situation.

Mr. DICKS. What do they get, 50 percent?

Mr. PETTY. No, sir, they get in lieu taxes. And it is an appraised value, appraised every 10 years. The Federal Government pays as a regular tax bill the same as a private individual. Those receipts from the timber sold from the CBWR lands are put into a fund which is available to pay those taxes. Assessments are made in 10-year increments. As I recall it is on either 70-, 80-, 90-year, every 10 years that fund is cleaned out. Whatever is left is put into the general fund.

NATIONAL POLICY FOR PAYMENTS IN LIEU OF TAXES

Mr. DICKS. Shouldn't we have a national policy? How can we justify having these individual little deals for certain counties? Why should we have a policy like this? Why shouldn't we have a national policy of payments in lieu of taxes that deals with everybody in a straight-forward equitable way? Why do we have the special deals?

Mr. PETTY. Special deals came about over the years.

Mr. DICKS. Shouldn't the BLM, as part of reform, come forward with a policy and say, Listen now, this was fine for 100 years, but now it is time to have a uniform national policy.

Mr. PETTY. The Public Land Law Review Commission made a recommendation very similar to that.

Mr. DICKS. I know, it was quite scholarly. But why didn't anything happen on it?

Mr. PETTY. That is a very controversial issue. Those States that are now benefiting very heavily from the particular law I think you would find would object very strongly to it. We just never have been able to sell it.

Mr. BURFORD. There is still a section in FLPMA on the Oregon and California Railroad lands.

Mr. DICKS. Has this Administration offered a bill that would make this uniform all over the country?

Mr. BURFORD. No, sir. We have offered very few bills, very few changes in the law.

Mr. DICKS. Do you think there ought to be one, Mr. Director?

Mr. BURFORD. I think it should be looked at definitely. I do not think you are going to remove the same political problems that you had when FLPMA was passed.

Mr. PETTY. This Administration is struggling to get some more equity in the payments in lieu of taxes program. We will be coming forth hopefully this year with some proposed legislation on that.

Mr. DICKS. What is the budget request for payment in lieu of taxes?

Mr. PETTY. The request is $45 million.

Mr. DICKS. For the whole country? And you are talking about the O&C counties getting 50 percent of $220 million, or $110 million, and the rest of the country gets $45 million?

Mr. PETTY. That is about what the State of Wyoming gets.

Mr. DICKS. Do they receive other funds?

Mr. PETTY. That is right.

Mr. DICKS. Could you give us for the record a State-by-State breakout of all the special laws, and I would like to know the counties and how much money is at stake so we, can take a look at this. Do you have it in your budget justification?

Mr. PETTY. We have it in Public Land Statistics published annually, but we will be glad to make sure you get a copy.

Mr. DICKS. I would like to see a state-by-state breakout.

Mr. BURFORD. There is a breakout on page 14.

Mr. DICKS. You don't break it out by Oregon and California lands and Coos Bay Wagon Road.

Mr. BURFORD. The $97 million over there in the other column is the payments from the Oregon and California lands.

Mr. DICKS. Washington gets $87,000 and Oregon gets $97 million. Wyoming gets $120 million. Those are mineral receipts though.

Mr. BURFORD. It is almost all mineral receipts in Wyoming. New Mexico I think is the highest. It gets $128 million. That is practically all——

Mr. DICKS. Minerals?

Mr. BURFORD. Yes, sir.

Mr. DICKS. I would like to see it broken out. I think we need to have it cited by statute. Can you do that for me?

Mr. BURFORD. I think we can, yes, sir.

Mr. DICKS. Thank you. Then we will be able to look at it.

Mr. PETTY. The complete table of laws we work under is published.

Mr. DICKS. Good. Let's move along here.

Mr. **Petty**. Here you go.

Mr. **Dicks**. Here it is. Good.

Mr. **Petty**. A lot of effort went into putting that together.

Mr. **Dicks**. We appreciate that.

Mr. **Petty**. The Statehood Act for example, brought all the States in that were admitted before Ohio and gave them the 4 percent on sale of land and material. Some were getting certain types of entitlements from receipts and others were not.

So, when Ohio came, all the States that had been missed you will find in the Ohio Statehood Statute. You can spend forever trying to find those laws. So, we finally got it and published it.

Mr. **Dicks**. Good. Thank you very much.

[The information follows:]

RECEIPT DISTRIBUTION

The following table displays the authorities for receipt disposition. For specific dollar amounts by State, see Public Land Statistics 1980, Tables 115-121.

TABLE 114.—LEGAL ALLOCATION OF BUREAU OF LAND MANAGEMENT RECEIPTS, FISCAL YEAR 1980

[In percent]

Source of receipts	Authority	Disposition of gross receipts: States and counties	General fund	Indian trust	Reclamation	Range improvement [1]
Mineral leases and permits:						
Public domain (except Alaska)	30 U.S.C. 191 and 286	50.0	10.0		40.0	
Public domain (Alaska):						
Oil and gas royalties	30 U.S.C. 191 as amended by Acts of July 7.	75.6	8.4	[2] 16.0		
All other mineral rents and bonuses.	1958, and Dec. 18, 1971 (Statehood Act and Alaska Native Claims Act).	88.2	9.8	[2] 2.0		
Oregon and California grant lands	43 U.S.C. 1181f	[3] 75.0	25.0			
Coos Bay Wagon Road grant lands	Act of May 24, 1939	[4] 75.0	25.0			
Choctaw Chickasaw lands, Oklahoma.	58 Stat. 484–5			100.0		
LU lands (Section 3)	Executive Orders 10046, 10234, 10322; Comptroller General Decisions 102563.	12.5	37.5			50.0
LU lands (Section 15)	Executive Orders 10046, 10234, 10322; Comptroller General Decisions 102563.	50.0				50.0
LU lands (Section 3)	Executive Orders 10787, 10890; Solicitor's Opinion Mar. 11, 1971.	25.0	25.0			50.0
LU lands (Section 15)	Executive Orders 10787, 10890; Solicitor's Opinion Mar. 11, 1971.	25.0	25.0			50.0
Shoshone-Arapahoe Tribes, Wyoming.	25 U.S.C. 611			100.0		
Naval petroleum and oil shale reserves.	30 U.S.C. 191		100.0			
Acquired lands	30 U.S.C. 355	([5])				
Outer Continental Shelf	43 U.S.C. 1338		100.0			
State selected lands (except Alaska).	Act of Sept. 14, 1960	90.0	10.0			
South half of Red River	Act of June 12, 1926	37.5		62.5		
Land and materials (Including timber):						
Oregon and California grant lands	43 U.S.C. 11817	[3] 75.0	25.0			
Coos Bay Wagon Road grant lands	Act May 24, 1939	[3] 75.0	25.0			

TABLE 114.—LEGAL ALLOCATION OF BUREAU OF LAND MANAGEMENT RECEIPTS, FISCAL YEAR 1980—Continued

[In percent]

Source of receipts	Authority	Disposition of gross receipts				
		States and counties	General fund	Indian trust	Reclamation	Range improvement [1]
Public domain and acquired lands in "Reclamation States".[6]	43 U.S.C. 391 and 30 U.S.C. 601	[7] 4.0	20.0		76.0	
Public domain and acquired lands outside "Reclamation States".[6]	31 U.S.C. 711 (17)	[7] 4.0	96.0			
LU lands	Executive Orders 10046, 10234, 10322; Comptroller General Decisions 102563; Executive Orders 10787, 10890; Solicitor's Opinion Mar. 11, 1971.	([8])				
Reclamation lands (within Reclamation project).	43 U.S.C. 394 and Cooperative Agreement Mar. 8, 1972.				[9] 100.0	
Townsites in Reclamation project	34 Stat. 116: 20 C.G. 365	5.0			[10] 95.0	
Naval petroleum and oil shale reserves.	10 U.S.C. 7431		100.0			
Grazing (Section 3):						
Public domain lands (grazing fee only).[6]	43 U.S.C. 315i	12.5	37.5			50.0
LU lands (grazing fee only)	Executive Orders 10046, 10234, 10322; Comptroller General Decisions 102563.	12.5	37.5			50.0
LU lands (grazing fee only)	Executive Orders 10787, 10890, Solicitor's Opinion Mar. 11, 1971.	25.0	25.0			50.0
Public domain and LU lands (range improvement fee).	Same as public domain and LU lands					100.0
Public domain (Alaska)	43 U.S.C. 316h	([11])				
Reclamation lands (within Reclamation project).	43 U.S.C. 394 and Cooperative Agreement Mar. 1972.				100.0	
Leased lands	43 U.S.C. 315m–4		[12] 100.0			
Grazing (Section 15):						
Public domain lands (total receipts).[6]	43 U.S.C. 315i	50.0				50.0
LU lands (total receipts)	Executive Order 10046, 10234, 10322; Comptroller General Decisions 102563.	50.0				50.0
LU lands (total grazing receipts)	Excutive Orders 10787, 10890, Solicitor's Opinion Mar. 11, 1971.	25.0	25.0			50.0
O&C and Coos Bay Wagon Road grant lands.	43 U.S.C. 1181d	75.0	25.0			
Reclamation lands (within Reclamation project).	43 U.S.C. 394 and Cooperative Agreement Mar. 8, 1972.				100.0	
Other receipts	Not specifically designated by law		100.0			

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[1] Range improvement fees are appropriated and available to Bureau of Land Management for the construction, purchase, or maintenance of range improvements.

[2] Amount to Indian trust is for Alaska Native Fund Commitment fulfilled as of Mar. 31, 1980.

[3] One-third of this amount is to reimburse Treasury for moneys appropriated for access roads and reforestation; counties receive at least 50 percent of gross receipts.

[4] Amount to counties is available for payment upon receipt of tax bills. Any surplus after each 10-year period is paid into the general fund.

[5] Distributed by the Agency having jurisdiction over the lands in the same manner as prescribed for other receipts from the same lands.

[6] Includes revenues from Reclamation lands outside Reclamation projects per Cooperative Agreement of Mar. 8, 1972.

[7] Payment to States represents 5 percent of net receipts.

[8] Distrubution same as LU mineral leases and permits.

[9] Payment to Reclamation Fund is made after deducting costs of sale, or 10 percent of revenue, whichever is less, to reimburse Bureau of Land Management for sale expenses

[10] Bureau of Reclamation may pay costs of sale from Reclamation Fund, or expenses may be paid and deducted by Bureau of Land Management prior to transfer to Reclamation Fund.

[11] Payment to State represents receipts in excess of the actual cost of administration of the grazing program in Alaska.

[12] Appropriated and available to Bureau of Land Management for the leasing of lands of grazing purposes.

TIMBER SALES

Mr. DICKS. If timber sales do remain at 97 million board feet in 1982 and 1983, what is the basis for the 1982 estimate of receipts of $15.7 million, equal to 1981, and $19.7 million in 1983?

Mr. BURFORD. It is based on a decrease in prices.

Mr. DICKS. You are obviously not expecting any increase in price for timber sold between 1981 and 1982.

Mr. BURFORD. No.

Mr. DICKS. Prices are way down?

Mr. BURFORD. I am not looking at the right figures.

Mr. HILDEBEIDEL. The figures are right here.

Mr. BURFORD. These are on the PD lands.

Mr. DICKS. Public domain?

Mr. BURFORD. Yes. That is our estimate on what we got in 1982 because of the fact that some of those contracts will be coming up for ending and the timber will have to be cut. Hopefully, the economy will look up a little bit in 1983, and we will have better receipts at that time.

Mr. DICKS. What were actual harvest levels in 1981?

Mr. BURFORD. The volume sold?

Mr. DICKS. No harvested.

Mr. HILDEBEIDEL. We don't have the harvest levels.

Mr. BURFORD. This is timber sold.

Mr. HILDEBEIDEL. That was sold.

Mr. BURFORD. We can look that up.

Mr. DICKS. Also give us a comparison between 1981, 1980 and 1979.

[The information follows:]

PD TIMBER SALES

The BLM's PD timber sale program is made up of small sales with an average value of $20,000 or less. The sales are sold on a lump sum basis, where the BLM offers a set amount of timber; and the purchaser agrees to pay a certain price. A majority of the contracts are paid in one lump sum, and since the lump sum sale method does not allow refunds for shortages in volume or additional billings for overages, there is no need to track the amount of timber harvested. The PD timber sale volume totaled 101.7 million board feet in 1981.

PD SALE LEVELS

PD timber harvest levels are not tracked since we receive one lump sum payment for the total sale before the timber is cut. A comparison of PD sale levels for 1979-81 is shown below:

[Million board feet]

Year:	*Volume*
1979	65.0
1980	89.9
1981	101.7

Mr. DICKS. What is the current backlog of unharvested timber?

Mr. BURFORD. There are 147.7 million board feet of uncut sold timber on the public domain. Do you want the O&C also?

Mr. DICKS. Yes.

Mr. BURFORD. That figure is 2.6 billion board feet.

Mr. DICKS. 2.6 billion board feet?

Mr. BURFORD. Yes, sir.

Mr. **Dicks**. Backlog?

Mr. **Burford**. I am referring to standing volume that is uncut.

Mr. **Dicks**. All right. How does this compare to previous years? You can provide that for the record.

[The information follows:]

VOLUME OF UNHARVESTED TIMBER UNDER CONTRACT (O & C)[1]

[Thousand board feet]

Date:	Volume
March 1979	2,183,000
March 1980	2,241,000
March 1981	2,502,000
March 1982	2,766,000

[1] Estimates are not available for PD sales. These sales are small and are generally paid in lump sum rather than by installments. Uncut volume estimates are not kept on contracts that are paid in full.

Mr. **Dicks**. How much is included in your request for harvest activities?

Mr. **Burford**. Do you mean for roads and so forth?

[The information follows:]

Timber Harvest Funds

The 1983 budget proposes a total of $19.8 million for timber harvest activities: $14.2 million in O&C and $5.6 million in the PD program.

Mr. **Dicks**. Off the record.

[Discussion off the record.]

OREGON AND CALIFORNIA GRANT (O. & C.)

Mr. **AuCoin**. Let's stay on O. & C. lands.

You are requesting a direct appropriation for the Oregon and California grant lands of $52.9 million. Would you tell the committee the basis of the $2.1 million you intend to carry over into both fiscal year 1983 and 1984?

Mr. **Burford**. It is in the construction and acquisition projects that carry forward on contracts that are not completed and roads that are not finished; and it involves multiyear contracts. You are familiar with the request for the appropriation; this is the second year.

Mr. **AuCoin**. I understand Congressman Dicks made reference to the February 15th article in the Corvallis, Oregon, Gazette Times.

Mr. **Burford**. Yes.

Mr. **AuCoin**. Which speculated on the sale or transfer of O. & C. lands in the State of Oregon. Can you dispense with that quickly for the purposes of the record? Whatever the rumors were that were behind this; can we lay them to rest for the record, quickly, and move onto another topic?

Mr. **Burford**. Secretary Watt has had the conversations with Mr. Miller.

Mr. **AuCoin**. That is the Oregon State Forester?

Mr. **Burford**. Yes, sir. The Secretary asked him to take a look at whether the State would be capable of managing those lands or whether they would be interested in purchasing them under some kind of an agreement.

I do not think there has been anything going forward on it. It is not definite policy.

Mr. AuCoin. It is not an Interior Department policy?

Mr. Burford. No, sir.

Mr. AuCoin. Does it seem to you a little unusual that the Secretary would talk to the Oregon State Forester who, if he is a good forester, would probably would like to add to his dynasty as many acres as you could throw at him. Doesn't it seem unusual that he would talk to the State Forester rather than talking to the Oregon Congressional Delegation or the Governor first?

Mr. Burford. I think the Governor was cognizant of it at that time. I think the conversations compared forest practices and things like that.

Mr. AuCoin. Nothing official, purely conversational?

Mr. Burford. Yes, sir.

Mr. AuCoin. No policy or intention you know of in the Department of the Interior?

Mr. Burford. No. As you know, the Administration is taking a look at asset management programs and land disposals. But to my knowledge, the thrust is not in the direction of large land holdings such as the O. & C. lands.

Mr. AuCoin. I would hope not.

Mr. Burford. That would require a very definite change in legislation, Congressman.

Mr. AuCoin. Last year BLM reported the problems being experienced as a result of the fall off in the timber harvest in the O. & C. and Coos Bay lands. I think we need for the purposes of the record the current volume of uncut timber—have you done this?

Mr. Burford. It has been requested and we will furnish that.

Mr. AuCoin. Including the value of the uncut timber?

Mr. Burford. We have some figures on value. The value of standing volume in dollars is $765.7 million. That is on the O. & C. land. On the Public Domain the value is $11.7 million.

Mr. AuCoin. Did you cut back on the planned sale and harvest levels for fiscal year 1982?

Mr. Burford. No. We are making some changes in policy on O. & C. sales in that we intend to offer some 1-, 2- and 3-year sales instead of just 3-year sales. We think that this will address some of the speculation problems inasmuch as short sales tend to be looking closer at the market that you are really going to be cutting for. But, some of the long-term sales are also needed to assure some continuity of operation.

Mr. AuCoin. What are the planned harvest levels for fiscal year 1982?

Mr. Burford. In 1982 it looks like 550 million board feet. For 1983 we are projecting 990 million board feet.

Mr. AuCoin. That is almost double.

Mr. Burford. We are hoping the housing market may change as I know you are also hoping, and we hope that will have a direct effect on the timber market—that the pipeline which is stopped up on the consumer end will start opening up, and timber will start flowing again.

Mr. AuCoin. Do you say that on the basis of the President's housing announcement as of yesterday?

Mr. BURFORD. No, sir, these figures were compiled sometime before the President's announcement on housing yesterday.

CONTRACT GRACE PERIOD

Mr. AUCOIN. You don't have the statutory ability to extend contracts like the Forest Service, do you? You have something called a grace period?

Mr. BURFORD. We give a grace period.

Mr. VAIL. We can extend.

Mr. AUCOIN. You can extend?

Mr. VAIL. Yes, sir, we have a procedure for extensions.

Mr. AUCOIN. What do you have in place now, extension or grace periods?

Mr. VAIL. It is a grace period right now.

Mr. AUCOIN. What is the difference?

Mr. VAIL. In November the Director gave a 3-month grace period on any contracts that would come up for default during that period, they would not have to apply for an extension. They would just be held in abeyance because we were considering the various options. He just recently extended that grace period for another 90 days. But we do have authority for extension. We do not have authority for modification.

Mr. AUCOIN. Your grace period now in effect is through June 30th, is that right?

Mr. BURFORD. Yes, sir.

Mr. AUCOIN. Now, the staff has given me an article from the Oregonian which I myself recall, dated February 12th. It quotes you, Mr. Burford, saying that you and the Interior Secretary do not believe you have the authority to either roll back prices or grant extensions of existing contracts.

Mr. BURFORD. Well, there is some question as to whether an actual extension is legal. We have granted a grace period.

Mr. AUCOIN. Your staff just said that you could extend.

Mr. BURFORD. My understanding at the time I granted the grace period was that extensions were not——

Mr. AUCOIN. What is your——

Mr. BURFORD. I will check that authority.

Mr. AUCOIN. What is your understanding of the extension authority?

Mr. VAIL. We do have authority for extension of contracts. Any contract through negotiation can be extended. It is similar to the Forest Service authority also. But the issue that was mainly quoted in that paper was about rollbacks or modifications.

Mr. AUCOIN. I realize that is one of the issues, but Mr. Burford, you are quoted as telling Oregonians and the Portland Oregonian Newspaper that you have the authority to neither roll back prices nor grant extensions.

Mr. BURFORD. Well, I will have to look that up and make a clarification.

Mr. AUCOIN. I wish you would. This committee would like to know. That is a very sensitive issue in the Northwest as you can well appreciate.

Mr. BURFORD. Yes, I have heard a bit from the Northwest.

Mr. **AuCoin**. This Member certainly is concerned about it and somewhat alarmed to see that apparently BLM is not consistent on this sensitive issue. There is some misunderstanding or misapprehension within your own agency.

Mr. **Burford**. I will check the legality on that and get you a determination.

[The information follows:]

Grace Periods for Timber Contracts

The Bureau does not have authority to waive contract rights, that is to reduce contract prices solely to ameliorate economic hardships.

On March 14, 1982, we announced a continuance of the grace period that prevents defaulting on agreements to purchase and harvest Federal timber. This gives public land interests and the Department an opportunity to explore all possible solutions to problems timber purchasers and the U.S. Government are experiencing.

The original grace period was implemented effective October 1, 1981, and provided that timber purchaser agreements would not be held in default.

THREE-MONTH GRACE PERIOD

Mr. **AuCoin**. What is the citation that you draw on? What statutory citation?

Mr. **Burford**. I can't quote it to you.

Mr. **AuCoin**. What impact do you think the changes in the planned sale and harvest levels will have? What impact do you expect from the grace period on those planned sale and harvest levels for fiscal year 1982?

Mr. **Burford**. Well, as you know, there is a request I think from Senator Hatfield, but our interpretation is that we don't have rollback authority. It is my understanding that Senator Hatfield has made a request for a legal opinion as to whether we do or not. There are some differences of opinion between Senator McClure and Senator Hatfield. Part of the difference of opinion, as I found out when I was in Oregon, is within the industry itself in Oregon as to whether rollbacks would be a good thing or not. We hope that by offering some short-term sales which can be bid at more realistic prices, we can put some people back to work in the area. Hopefully they will not be bidding up to $500 per 1,000 board feet as they were in the past, bidding on the come, as it were, and that their bids would be more realistic and that they can reopen some mills and put some people back to work.

Mr. **AuCoin**. One of the arguments that will be made in this committee is that the grace period now in effect, weakens your own argument for the planned increase in sale and harvest levels. How do you answer that question?

Mr. **Burford**. Well, that is something that I guess is in the eye of the beholder. I do not know any way of finding out except time alone will give the answer. I can't predict the way people will react.

Mr. **AuCoin**. Isn't one of the things that anyone who reads this record needs to keep in mind the fact that investments now are for future sales levels. Since most expenditures now are to prepare those sales for harvest 2 or 3 years down the road. Any curtailment now is going to hurt our ability to produce the timber when, down the road, the housing industry rebounds. Isn't that what this committee ought to be considering?

Mr. **Burford**. We feel we will be able to meet the demand for timber in the future.

Mr. **AuCoin**. Something more you want to say on that?

Mr. **Burford**. No, sir.

O. & C. TIMBER RECEIPTS

Mr. **AuCoin**. What were the actual receipts on O&C lands in fiscal year 1981 broken down between the BLM and Forest Service? I would like those numbers in comparison to your original estimate.

Mr. **Burford**. All right, we will get them for the record. We don't have Forest Service, I am sure. We can give you the BLM estimates: 1981, $193,912,000. What was the estimate?

Mr. **AuCoin**. $193 million?

Mr. **Burford**. Yes. We have to get—we do have it? We don't have the estimate?

[The information follows:]

FISCAL YEAR 1981 RECEIPTS FROM O. & C. LANDS

Bureau of Land Management:	
Original estimate	[1] $201,838,000
Actual receipts	168,035,399
Forest Service:	
Original estimate	[2] 30,962,000
Actual receipts	25,876,084

[1] Based upon levels shown in fiscal year 1981 justifications.

[2] Based upon actual 1981 percentage.

Mr. **AuCoin**. Have there been defaults this year or has the grace period avoided defaults?

Mr. **Burford**. There have been no defaults that I know of.

Mr. **AuCoin**. In light of current situations do you still believe that you will be able to offer for sale and harvest 1.1 billion board feet of timber in fiscal year 1983?

Mr. **Burford**. Yes, sir.

Mr. **AuCoin**. Have you revised your 1983 estimate of receipts on that expectation?

Mr. **Burford**. We have not so far. We have not made any revisions since we published this.

Mr. **AuCoin**. You are making that estimate but you are not confident enough to take that into consideration on your estimate of receipts?

Mr. **Burford**. This is like any budget. It is predicated on assumptions. We may make some revisions down—in the months to come.

Mr. **AuCoin**. Provide for the record a breakdown of your request for timber management for BLM and Forest Service showing the amounts budgeted for timber sales preparation, sales offering, harvest and other activities for fiscal years 1981, 1982 and 1983.

[The information follows:]

TIMBER MANAGEMENT

The following is a breakdown of the timber management budget for the BLM and FS for years fiscal year 1981–fiscal year 1983:

[In thousands]

	Fiscal year		
	1981	1982	1983
Bureau of Land Management:			
Environmental assessment	$553	$528	$483
Forest management plans	829	793	726
Timber sale preparation	10,224	9,778	8,953
Contract supervision	2,073	1,982	1,815
Trespass	138	132	121
Total	13,817	13,213	12,098
Forest Service:			
Timber sale preparation	(1)	(1)	1,736
Contract supervision			306
Total			2,042

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[1] The O&C Funds received by the Forest Service for these years were designated for access and road construction.

Mr. AuCoin. We will stand in recess until 1:30.

Afternoon Session

FOREST SERVICE-MANAGED O. & C. LANDS

Mr. AuCoin. The hearing will resume.

Mr. Burford, the Forest Service is responsible for managing 492,400 acres or 17 percent of the O&C grant lands. The committee would like to know if the funds displayed in the budget represent the total cost to the Forest Service of managing those lands or, if not, what is the current estimate of the forest management costs.

Mr. Burford. We don't know whether that is the total cost or not.

Mr. AuCoin. Can you tell the committee?

Mr. Burford. No, I don't have that information.

Mr. Petty. We have in our budget a total of $3 million for the Forest Service, which is for the road construction. We have no other funds in the O&C budget for the Forest Service.

Mr. AuCoin. If skeptics raised the question, namely, why shouldn't the Forest Service be fully reimbursed for those expenses, what would your response be?

Mr. Petty. Our response would have to be, Mr. Chairman, that they should come before the committee and tell you what they need. The O&C budget we have proposed consists of the funds necessary for the BLM management of the 2 million acres in the BLM's jurisdiction. It also includes $3 million for the Forest Service for managing about a half million acres of O & C lands in their jurisdiction.

As far as the reforestry program, the sales program, there is no money in there for the Forest Service portion of that program.

Mr. Vail. Historically they have never asked for that part of it. It has just been for the construction and maintenance of roads.

O. & C. LANDS CONSTRUCTION AND ACQUISITION

Mr. AuCoin. You are asking for $1.1 million for construction and acquisition, a decrease of $2.8 million. How many completed designs do you have for building projects?

Mr. Burford. The plan for the Elko office is the only construction start we have in the lower 48.

Mr. AuCoin. I am referring to page 232 of your justifications. You are asking for $1.1 million for construction and acquisition which is a decrease of $2.8 million. My question to you is how many completed designs do you have for building construction projects?

Mr. Burford. I don't believe we have any at the present time.

Mr. AuCoin. None? How do you determine priorities for recreation construction?

Mr. Burford. Our priorities are determined through requests from the States in the formulation of the budget.

Mr. Petty. A lot of the recreation construction, most of it, is brought on by public pressure. Normally, what we have in this budget in recreation is strictly for sanitary facilities where there is a large public use of facilities and we simply don't have the sanitary facilities to accommodate them.

Mr. AuCoin. You are familiar with the Nestucca River project?

Mr. Hildebeidel. That is in the O&C appropriation.

Mr. AuCoin. I am told by staff that is the recreation project and the estimate for fiscal year 1983 is——

Mr. Burford. $55,000.

Mr. AuCoin. What was the basis for selecting that project?

Mr. Burford. The basis for selection was priority of use.

Mr. AuCoin. Can you elaborate?

Mr. Burford. It was chosen by the State Director as being the one most in need of either refurbishing or construction of sanitary sites.

Mr. AuCoin. Is that based on the volume of public inputs?

Mr. Burford. Yes.

Mr. AuCoin. Solely on that basis?

Mr. Burford. As far as I know.

Mr. AuCoin. What is the estimated total cost of that project? When will it be complete?

Mr. Burford. I am not sure we have an estimate on that yet.

Mr. AuCoin. You don't have any feeling for what the estimated total cost will be at the time of approving funds for design?

Mr. Burford. We don't have an estimate of total costs until we get the design. Then we can take a look and make an estimate of the cost. Is there a rule of thumb on design?

Mr. Petty. It depends on the topography, the amount of work you have to do to get the foundation ready, what type of building you are going to put in. Based upon past experience, this being on a river, we probably will run about $2 million stretched over a number of years because we can never get that much money in one year's construction budget. If this building is what it appears to be, it will probably be about a $2 million structure.

Mr. AuCoin. About a $2 million structure?

Mr. Petty. That is what most recreation facilities run.

Mr. AuCoin. You are requesting two positions for this program?

Mr. Petty. This is simply for survey and design.

Mr. AuCoin. Two positions are adequate for that phase of it?

Mr. Petty. Yes.

Mr. **AuCoin**. Will no new road construction be required in fiscal year 1983 for timber access, recreation access? Let the record show that Mr. Burford shook his head yes. Your testimony is yes, that is true, there will be no new construction required?

Mr. **Burford**. That is right.

O. & C. MAINTENANCE PROGRAM

Mr. **AuCoin**. On page 239 you request $5 million for maintenance. That is a decrease of $1.2 million. My question is how do you plan to accomplish your goal of reducing the costs to maintain a recreation unit from $756 to $702? How much of your recreation maintenance is contracted?

Mr. **Burford**. We are going to largely be using our own work force so that $80,000 worth of services will be performed by BLM crews.

Mr. **AuCoin**. My question is, with the decrease of $1.2 million in your request for maintenance, how, specifically, do you plan to accomplish your goal of reducing the cost of maintaining a recreation unit from $756 to $702?

Mr. **Burford**. If I understand the question, the $80,000 is for services which will either be deferred or performed by BLM crews and concerns recreation. The remainder of that reduction, which is approximately $1 million, let's see. What is it? The reduction is approximately $1 million. That is for road maintenance and things like that. We think there is enough excess in that program so that we can reduce the program and still maintain roads.

Mr. **AuCoin**. What do you think the impact of reducing road, trail and bridge maintenance by almost 25 percent will be?

Mr. **Burford**. Obviously, there will be some impact; but with greater efficiency of operation, we will take care of it. We think the budget request is adequate.

Mr. **AuCoin**. Does that mean the structures are currently in good condition?

Mr. **Burford**. They are in good condition at the present time. According to the input we have from the area, we think that that is an adequate budget to take care of the necessary maintenance and upkeep in the fiscal year 1983.

Mr. **AuCoin**. You said there would be "some impact". What do you mean by "some impact" due to the 25 percent decrease in the budget.

Mr. **Burford**. This has been a highly funded project in the past. We do have adequate funding. We think there will be some offset by some using paid maintenance which we estimate at $1 million according to the budget justification.

Mr. **AuCoin**. Can you think of any other impacts on bridges or roads or trails due to the decrease of almost $1.1 million?

Mr. **Burford**. Not at the moment.

Mr. **AuCoin**. What happens to the number of bridge inspections under your budget proposal?

Mr. **Petty**. Yes, we have a bridge inspection program; but we have managed to stay current with the bridge inspections. We know of no bridges that are a danger to human life at the present time.

As far as we know, our bridge inspection program is in pretty good shape.

Mr. AuCoin. It is in good shape now?

Mr. Petty. It is in fair shape.

Mr. AuCoin. Fair shape?

Mr. Petty. It depends on what you call good and fair.

Mr. AuCoin. What do you call good and fair?

Mr. Petty. I think we do an adequate inspection.

Mr. AuCoin. Currently?

Mr. Petty. Our engineers say we do.

Mr. AuCoin. Currently?

Mr. Petty. That is correct.

Mr. AuCoin. What happens to the number of inspections under the fiscal year 1983 budget request as opposed to say 1981 or 1982. The information we have is that they are going to be reduced to 30 this year and 30 in 1983.

Mr. Burford. Thirty inspections in 1982 and 30 in 1983, is that correct?

Mr. AuCoin. I believe you did 100 inspections in 1981?

Mr. Petty. Yes, we did. We have had a crash program going on on bridge inspections for the last several years. We think we have those bridges all inspected.

Mr. Yates. They have all been inspected?

Mr. Petty. Yes, providing we don't have another flood in Oregon to wash them out again. As far as we know the bridges are in pretty good shape. A lot of the old logging bridges we had in the past have been removed with one exception, with which I think you are familiar, which we were forced to keep.

Mr. AuCoin. Are the counties required to maintain those roads and bridges?

Mr. Petty. As a general rule they are not. Users are—that is the timber companies.

O. & C. ROAD USER FEES

Mr. Hildebeidel. The decrease of $1 million will be offset by an increase of estimated user road collections in our permanent appropriations of $1 million.

So, that there will be some offset.

Mr. AuCoin. What is that again?

Mr. Hildebeidel. In our permanent appropriations we have a provision for collecting user fees for road use, particularly on the heavy volume timber roads, where you have multiple users and heavy logging trucks. We collect user fees.

Mr. AuCoin. Are you going to increase those?

Mr. Hildebeidel. We are projecting we will have an increase in the amount of money collected under those user fees and we will recover about $1 million, which mostly offsets this decrease.

Mr. AuCoin. $1 million increase in those fees?

Mr. Hildebeidel. That is correct.

Mr. AuCoin. All right.

Mr. Hildebeidel. That is in the permanent appropriations part of our justifications.

Mr. AuCoin. How would those fees break down for an individual user right now?

Mr. Petty. How do the fees break down?

Mr. AuCoin. What is the average fee for an individual user right now?

Mr. Petty. The fee is based upon so many factors, an average would really be almost meaningless. It is based upon the quality of roads, the distance they go, the cost at the time the road was built.

Mr. AuCoin. In the aggregate, how much of an increase will this be in the fees, the million dollar increase?

Mr. Hildebeidel. The increase would be from $3 million to $4 million.

Mr. Petty. It also depends on the amount of timber you are hauling over it.

Mr. Hildebeidel. That is correct.

Mr. AuCoin. This is not a new system you are proposing, it is one you already have in existence?

Mr. Hildebeidel. That is correct.

Mr. AuCoin. The committee needs to know how that system works. You have indicated it depends on a lot of variables. If you want to submit that for the record that is fine, but I think the committee would like to know how that system works.

Mr. Petty. That is a very, very complex system.

Mr. AuCoin. Then you would probably like to submit it for the record.

Mr. Petty. It is a very thick report.

Mr. AuCoin. Make an illusion to it for the record then.

Mr. Petty. The committee may desire to have it for their file.

Mr. AuCoin. Fine.

Mr. Hildebeidel. I would point out that on page 308 we do discuss road maintenance deposits. We provide a very short summary. We don't provide the detailed user fee collection procedure but we do indicate the increase.

Mr. AuCoin. Why don't you provide it for the committee's files.

[The information follows:]

O. & C. Road User Fee

The Maintenance Fee Schedule used in Western Oregon was developed to insure that users of BLM's road system are equitably charged for necessary road maintenance. The fee consists of two components: the maintenance fee to cover the cost of road maintenance and the Rock Wear fee to cover the cost of replacing the road surface material. Each of these fees varies depending on the type of use and the distance traveled. There is no fee for general public use. Fees collected from the system do not cover all road maintenance requirements in Western Oregon; and in fiscal year 1983, it will be necessary to supplement these fees with $3.5 million from the O&C appropriation.

Although the system appears complicated, it is relatively simple in practice. The predominant use of BLM's Western Oregon road system is by purchasers of BLM timber. As an example, a typical sale consists of two million board feet of timber. The purchaser will perhaps use 10 miles of BLM road. If the road surface is crushed rock, then the maintenance fee is:

$ .76 per thousand board feet per mile

or

$ .76×2,000×10=$15,200

The rock wear fee is:

$ .5357 per thousand board feet per mile

or

$ .5357×2,000×10=$10,714

The total fee is $15,200+$10,714=$25,914

O. & C. RESOURCES MANAGEMENT

Mr. **AuCoin**. On page 245, you are requesting $46.3 million for renewable resources management. That is an increase of $4.3 million.

The committee would like to know why you will be able to defer some presale preparation work for future years sales, that may not be required as a result of recently completed western Oregon management plans.

Mr. **Vail**. I don't have the information.

Mr. **AuCoin**. Does anyone have it?

Mr. **Hildebeidel**. As I understand it, sir, in some of the EIS's being done in western Oregon there are additional buffer areas that are being included for which there may not be any timber cut. As a result, some of the sale offerings will be consolidated into fewer sales with larger volumes offered. From that, our people in Oregon estimate that they will be able to defer some of the sale preparation work.

Mr. **AuCoin**. What is the status of the three EIS's that were to be completed by December 31st of this year?

Mr. **Hildebeidel**. Can you tell him?

Mr. **AuCoin**. Does anyone know?

Mr. **Burford**. We have that information. I was just trying to think. I have taken a preliminary look at one of them. I know there are a few others that are in various stages of preparation.

Mr. **AuCoin**. Would it be easier to submit it for the record?

Mr. **Burford**. No, I think we can find it. The one I have seen is the one for Eastside Salem.

Mr. **AuCoin**. Eastside Salem?

Mr. **Burford**. Yes.

Mr. **AuCoin**. That will be ready July 13th of 1982?

Mr. **Burford**. Yes, and the Roseberg target date is December 10, 1982. This is another one.

Mr. **AuCoin**. There should be a third one.

Mr. **Burford**. The Westside Salem target date was December 30, 1981. I do not know where that is right now. That was the target date. I guess it was filed. I have not seen it.

O. & C. REFORESTATION PROGRAM

Mr. **AuCoin**. Your request for timber development is $27 million, an increase of $3.1 million.

Can you tell the committee about your reforestation backlog?

Mr. **Vail**. I don't have the number of acres. I know we do have a reforestation backlog.

Mr. **AuCoin**. Does anyone have that information?

Mr. **Petty**. The backlog is about 29,000 acres.

Mr. **AuCoin**. 29,000 acres?

Mr. **Petty**. We have about 29,000 acres that need to be reforested.

Mr. **AuCoin**. Is it wise to go forward with more timber development, increasing the budget there and not providing funds to overcome that reforestation backlog?

Mr. **Petty**. Mr. Chairman, we have worked on the reforestation with Mr. Duncan on this committee for many years. We believe we have a program going that will maintain reforestation in pretty good shape. We have contracts with the Forest Service, as well as our own nurseries, to produce the seedlings, and we do not have any serious backlogs of areas capable of being reforested. We have some areas which are too steep in terrain, and the soils are so poor that to date we just don't have a way of reforesting.

Mr. **AuCoin**. But they were cut over, weren't they?

Mr. **Petty**. They were cut or burned over. We do have experiments going on to try to develop genetic strains to reforest that land.

Mr. **AuCoin**. How much of the acreage was cut over as opposed to burned over?

Mr. **Petty**. That I do not have.

Mr. **AuCoin**. Can you provide it?

Mr. **Petty**. I think we can probably provide that.

[The information follows:]

Reforestation Backlog

The Bureau has 28,687 acres of understocked backlog. This is made up of 16,902 acres of cut over and 11,785 acres of burned over land.

Mr. **AuCoin**. Most of the 29,000 acres would be in need of reforestation because of natural phenomena?

Mr. **Petty**. I do not know. We have some very good statistics on this.

Mr. **AuCoin**. How can the committee be sure, before it agrees to a $3.1 million increase in timber development, that you have done a good enough job of reforestation? You have to say more than you have a pretty fair program.

Mr. **Hildebeidel**. Timber development money is used for reforestation.

[Brief recess for vote.]

O. & C. REFORESTATION FUNDS

Mr. **Yates**. What is your feeling about O&C grant lands? Are we paying them too much money? I know Mr. AuCoin wouldn't ask you that question.

Mr. **Petty**. Mr. Dicks did.

Mr. **Yates**. Did he really? There is a good neighbor.

Mr. **Burford**. He was taking a long, hard look at it. The question we were on just before Mr. AuCoin left was concerning timber development, and the question on the budget. I think there was some misconception there. The timber development program funds under the proposed 1983 budget will reforest 29,000 acres, provide land treatment for 43,000 acres, and provide stand improvement on 26,000 acres. There is a total increase requested in that program of more than $3 million. About $600,000 of it goes to the Forest Service for a continuing cooperative program conducted in the southern part of Oregon to try to get reforestation on some areas where stands have proven to be very difficult to reestablish. They are dry south slopes. The soils are thin, and they really are not very productive.

The two management agencies have had a cooperative program going for 2 or 3 years now trying to find a genetic strain of seedlings and find when those seedlings of various strains should be planted in order to get stands reestablished on some lands that were forest—where the trees were taken off a good many years ago.

Some of those areas that have stands on them now will probably not be logged unless the agencies do find a way of getting a good reintroduced stand. He also brought up the backlog. That backlog does consist, as it has for some time, of about 50,000 acres, and those acres on O&C lands are in that particular area, the majority.

Mr. YATES. 50,000 acres, all O&C lands?

Mr. BURFORD. Yes.

[COMMITTEE NOTE.—Subsequent to the hearing, the Bureau advised the committee that the backlog is not 50,000 acres, but is 29,000 acres as stated earlier in the hearing.]

PUBLIC DOMAIN (PD) TIMBER LAND

Mr. YATES. Is there a backlog for reforestation for public land outside of O&C lands?

Mr. BURFORD. I don't believe so. I have not seen one identified.

Mr. YATES. I see.

Mr. BURFORD. There is some PD forest in western Oregon. It is possible some of the backlog is on PD, but I do not think so.

Mr. YATES. How many acres of timberland do you have among the public lands?

Mr. BURFORD. Classified as timberland, do we have a breakdown on that?

Mr. PETTY. No.

Mr. YATES. Do you have much land like that? I have an impression that all of your lands are sandy, clay, scrub and so forth.

Mr. BURFORD. Most of our lands are not highly productive. We have some in Idaho.

Mr. VAIL. We also have some in northern California.

Mr. BURFORD. There is some in New Mexico, some in Southern Colorado, and some in Western Colorado, but they are not really highly productive timberlands.

Mr. YATES. Are they subject to timber cut?

Mr. BURFORD. Yes, in some cases.

Mr. YATES. If they are subject to a timber cut, do you have a reforestation program for them?

Mr. VAIL. Yes.

Mr. YATES. And there is no backlog for that reforestation?

Mr. **Vail**. It is a minor backlog; it varies from one year to the next. It is nothing like the backlog we are talking about in the O&C.

Mr. **Yates**. I see. Why such a backlog in O&C?

Mr. **Burford**. It is because of this problem on some of these steep, sandy, south-facing slopes that are dry.

Mr. **Yates**. I see. Because of the surface conditions?

Mr. **Burford**. It is because of surface conditions and difficulty with which stands are reintroduced. We are working on some strains and some methods to try to reforest these areas. If we can find a way to do it, then I think we can clear up the backlog.

Mr. **Vail**. Even with the backlog, this past year, just for an example, we did a considerable amount of work on over 51,000 acres—planting, seeding, what we call site preparation, and seedling protection on 5,600 acres. We call it release, when we convert grassland or scrub brushland to prepare it so we can plant it. There was over 4,000 acres in total, put that all together, it is around 51,000 acres.

WESTERN OREGON REVENUE SHARING

Mr. **Yates**. The Coos Bay Wagon Road lands are on a tax equivalent basis. O&C grant lands are not. In 1980 the O&C payments were 5.5 times tax equivalence. What would be the comparable figure for 1981 on a comparable basis? Can you supply that for the record? What would be a comparable figure?

Mr. **Petty**. It would be about the same ratio. It has been for quite some time.

Mr. **Yates**. Is there any reason why O&C land shouldn't be like the Coos Bay land?

Mr. **Burford**. It is different because of the legislation.

Mr. **Yates**. I know. But as a practical matter, why should there be a distinction?

Mr. **Petty**. As a practical matter, there probably should not be. There was an effort made both in the House and the Senate a few years back to try to get that changed. It was not done.

Mr. **Burford**. Mr. Chairman, if you want some reaction on that you should wait until Mr. AuCoin gets here. I think he might have something to say about that.

Mr. **Yates**. I know his reaction. I was trying to get yours, to make you a witness for the defense.

Mr. **Burford**. What kind of witnesses do they call them when they are called under protest?

Mr. **Yates**. Hostile.

Mr. **Burford**. Yes, a hostile witness—unfriendly witness.

Mr. **Yates**. I wouldn't call you a hostile or an unfriendly witness. Another possibility is to make O&C lands comparable to National Forest system lands which receive 25 percent timber revenues as opposed to 50 percent for the O&C lands.

Mr. **Burford**. Yes, sir. That is a direct county payment, if I remember correctly.

Mr. **Yates**. That is right. What about O&C lands conforming to that system?

Mr. **Burford**. That is another alternative.

Mr. **Yates**. I recognize that, but is it an alternative that we ought to——

Mr. **Burford**. That is called hedging.

Mr. **Yates**. I know. Is it an alternative that the Congress ought to consider favorably?

Mr. **Burford**. I should have answered that before you caught your breath. I think it is one that they should consider.

Mr. **Yates**. I take it from that answer you don't think it ought to be considered favorably?

Mr. **Burford**. I am making no prejudgment on which way Congress would care to go on that. It is a consideration only.

Mr. **Yates**. But you are the expert witness.

Mr. **Burford**. I found out one year ago this month exactly what O&C stood for, so I don't——

Mr. **Yates**. I see.

Mr. **Burford**. It took me the first 3 months to distinguish between O&C and OCS.

FORESTRY INTENSIFIED RESEARCH (FIR)

Mr. **Yates**. Will the amount in the budget for the FIR program at $1 million be adequate to allow you to meet your program goals within the time schedule?

Mr. **Petty**. The $1 million is the same as last year.

Mr. **Hildebeidel**. It is a transfer.

Mr. **Burford**. Partial transfer to Forest Service?

Mr. **Petty**. Yes.

Mr. **Yates**. Can you meet your goals?

Mr. **Hildebeidel**. Yes.

Mr. **Yates**. You can. If you couldn't, would you tell me?

Mr. **Petty**. Yes, sir. That is Mr. Hastey's favorite program if you recall from last year.

RESOURCE MANAGEMENT PLANS (RMP'S)

Mr. **Yates**. How long do you estimate it will take you to complete the RMP process?

Mr. **Hildebeidel**. Are you talking about western Oregon alone?

Mr. **Yates**. All right. Let's talk about western Oregon.

Mr. **Burford**. I think we have a schedule.

Mr. **Vail**. I don't have it with me.

Mr. **Yates**. Put it in the record then. Do you have a schedule?

Mr. **Burford**. I think we have.

Mr. **Yates**. I would like to know what the schedule is.

[The information follows:]

RMP SCHEDULE

We have not yet developed an RMP schedule.

Mr. **Yates**. Can you meet your schedule? You are cutting your budget for that you know.

Mr. **Burford**. We think we can meet our schedule, yes.

Mr. **Yates**. Okay.

Mr. **Burford**. I thought we had that schedule. Mr. Chairman, maybe I better correct that. I am not sure we have a resource management plan schedule.

Mr. **Yates**. Shouldn't you have it?

Mr. **Burford**. Not yet. We are still working some of them up. We have an EIS schedule.

Mr. **Yates**. Shouldn't you have a resource schedule too?

Mr. **Burford**. I don't believe we have set a schedule on resource management plans.

Mr. **Yates**. That is not the question I asked you. Shouldn't you have one?

Mr. **Vail**. No. As I explained yesterday, the RMP will be scheduled as issues drive us. Right now we are in the completion stage on some forestry EIS's which are ahead of the RMP. We are just now implementing them. We don't visualize an RMP in that area for sometime.

WILD HORSE AND BURRO PROGRAM

Mr. **Yates**. Let's talk about your favorite program, the wild horse and burro program. You have increased the amounts it will take for an interested person to adopt a horse. I think the price is now $200?

Mr. **Burford**. Yes, sir.

Mr. **Yates**. The fee is $75 for a burro. You don't have people breaking down your doors to get at them now, do you?

Mr. **Burford**. No, sir.

Mr. **Yates**. What are you going to do about it? The herds are going to continue to grow and grow, aren't they?

Mr. **Burford**. We increased the fee about a year ago, at the suggestion of a House Committee.

Mr. **Yates**. Mr. Udall's committee?

Mr. **Burford**. Yes, Mr. Seiberling's subcommittee. They made a suggestion in last year's report that we increase those fees to come closer to actual cost.

Mr. **Yates**. Actual cost?

Mr. **Burford**. We did not go to actual cost. We went up to about 65 percent of actual cost. This year they have suggested we went up too fast. So, we are having a little difficulty finding out exactly what we should be using.

Mr. **Yates**. What the proper level is.

Mr. **Burford**. It is definite that an increased fee will decrease adoption demand. However, I think that it should be pointed out that the adoption fee is only the beginning when you take on a horse, as those of us who have worked with horses all our lives know, especially when you are in population centers and are faced with feeding those horses prepared feed. The horse will eat 24 hours a day if given everything he wants.

A cost of $75 a month is not an extraordinary amount for the upkeep of a horse in an area such as we are located in right now.

Over a period of a year, that amounts to $900 for upkeep; and that is the same as upkeep on an automobile. So, the initial cost is not what people really should be looking at. I do not think a lot of the people that take on a horse recognize that, and I think that is what causes some of our problems. Many people don't understand the nutrition of a horse, the necessary care, the fact that they need exercise, the fact that they need training.

We receive letters about this. For example, some horse recently broke some little girl's arm. There was a letter that appeared in one of the western newspapers just within the last day or two that a horse had kicked some child in the head. They never had been able to get this horse gentle. I think there are a lot of things misunderstood about wild horses.

But what the fee should be, I do not know. We have moved toward cost recovery. It should be understood that when we are looking at approximately $350 to get those horses processed and to the point of adoption, there is no charge against that horse for the amount of feed that has been consumed on the range prior to capture.

Mr. YATES. How many horses will you destroy this year, under your husbandry program?

Mr. BURFORD. I do not think I have the figures on that. We have put some horses down because of cripples. It hasn't been too many, but some that are not adoptable and have been put down.

HORSES TO BE ADOPTED

Mr. YATES. Now, your justification says you want to remove 10,100 horses in 1983. How many will be adopted at $200 per horse; it won't be very many, will it?

Mr. BURFORD. We are estimating 4,200 horses and 1,000 burros.

Mr. YATES. Who adopts burros?

Mr. BURFORD. That's a question I have asked myself several times, because I find a lot of people think burros are very cute little animals.

Mr. YATES. Are they?

Mr. BURFORD. Well, beauty is in the eye of the beholder.

Mr. YATES. Right.

Mr. BURFORD. They obviously never tried to pack one.

WILD HORSE AND BURRO LAWSUITS

Mr. YATES. What is the status of the lawsuit by Wild Horse Organized Assistance? How many lawsuits do you have?

Mr. BURFORD. I believe the number is eight.

Mr. YATES. All pending, all seeking the same relief?

Mr. BURFORD. They're after my hide.

Mr. YATES. Your hide.

Mr. BURFORD. Are you referring to the last one that was filed?

Mr. YATES. Brought against your new regulations.

Mr. BURFORD. This one is filed against new regulations?

Mr. YATES. Yes.

Mr. BURFORD. I don't believe that is docketed yet.

Mr. YATES. You have eight suits pending?

Mr. BURFORD. There are two or three in Nevada and a couple in Wyoming that have been in process for 2 or 3 years. There was one filed about 2 weeks ago in Nevada. I had put a moratorium on putting any horses down pending the outcome of this suit. The judge asked me to extend that moratorium to give him more time to decide, and I made that decision yesterday. But that is just the latest of eight or nine suits.

Mr. YATES. What is the status of the suit by the Mountain States Legal Foundation which seeks to get the Government to pay for the damage done by horses to the forage? On private property?

Mr. VAIL. The judge found in favor of Mountain States and ordered the Bureau to remove those horses that were in Rock Springs, Wyoming.

Mr. YATES. Were the horses on private property?

Mr. VAIL. They were partially on private property and partially on BLM property, but the situation was that we were proposing a temporary reduction of livestock until we could get the horses off.

Mr. YATES. Did you get the horses off?

Mr. VAIL. Yes, sir, we did.

Mr. BURFORD. It is a checkerboard land case.

Mr. YATES. Do you do any checking to see whether or not people who adopt them take good care of the horses?

Mr. BURFORD. Yes, sir. Compliance checks in 1981 amounted to 1,850. We are estimating 500 in 1982 and 500 in 1983.

Mr. VAIL. Mr. Chairman, on the suit you asked about on Mountain States, there was another part of it that was on liability, in particular against the previous Director and his liability to the case. That part is, we think, being appealed.

Mr. YATES. Oh, did they hold him liable?

Mr. VAIL. The judge found that he was liable, so they are appealing that part.

Mr. YATES. Personally?

Mr. VAIL. That is the way we understand it, yes, sir.

Mr. YATES. Well, if he is personally liable, why isn't the boss personally liable?

Mr. VAIL. That is why we are appealing it.

Mr. YATES. Wait a minute. Did the judge also find the boss personally liable?

Mr. VAIL. The case was—when was it decided?

Mr. BURFORD. It was decided before I was confirmed.

Mr. YATES. So, you are not liable?

Mr. BURFORD. If they amend the case to include me, I will be back in here requesting——

Mr. YATES. But that is not a personal liability. That is an official liability.

Mr. BURFORD. That is my position on it.

Mr. YATES. The official liability would require the Government to pay on your behalf. But I understood Mr. Vail to say it was a personal liability.

Mr. VAIL. Yes, sir.

Mr. YATES. So you are out of it, as I understand the law.

Mr. VAIL. Because this was a decision rendered under the previous Director, he was held personally liable for it.

Mr. YATES. That is kind of interesting, isn't it?

Mr. BURFORD. It would be of very great interest if I get held personally liable, yes.

SOIL, WATER, AND AIR PROGRAM

Mr. YATES. Well, let's take a look at your soil, water and air management request of $14.8 million. This is $2.3 million less than the 1983 base and a decrease of forty-five FTE's. If you are increasing and expanding energy development as you are, does it make sense to reduce the soil, water and air management? Shouldn't you expand that program in order to take better care of the soil, water and air?

Ms. BLACKSTONE. In most of the energy programs, for example, energy leasing, the lessees are required to perform reclamation in order to take care of that. Only a portion of this type of budget is related to energy leasing activities.

Mr. YATES. If I understand your answer you are saying that the reduction will not result in a lessening of the care for soil, water and air because the lessees will be taking up the responsibility where the Government leaves off, is that what you are saying?

Ms. BLACKSTONE. To the extent that you are talking about energy leasing activities, that is true. This budget subactivity applies to many other things such as grazing and many other functions.

Mr. YATES. Well, grazing. What do you mean by many others?

Mr. VAIL. Well, it is all related to grazing, wildlife, watershed. I assume that is what she meant by others.

Mr. YATES. All right, but are your grazing, wildlife, watershed and many other activities going to be hurt by the reduction?

Mr. VAIL. No, sir.

MAJOR FLOOD CONTROL STRUCTURES

Mr. YATES. How many major flood erosion control structures are there on the public lands? These are dams we are talking about, aren't they?

Mr. BURFORD. Yes.

Mr. YATES. Well, how many dams are there on the public lands that you have to worry about?

Mr. BURFORD. I do not know how many.

Mr. YATES. Didn't you answer that last year? We went into it with Fish and Wildlife Service.

Mr. PETTY. Also with BLM. To my memory, I believe it is 22,000 total dams under the definition.

Mr. YATES. Right. Last year we discussed the lessening of the funds for maintaining the dams and what impact that loss of revenue would have on the safety of the structures.

Mr. PETTY. We assured this committee that with the funds we had there, we would take care of the one high dam that we had that had some potential danger.

Mr. YATES. Danger for the people downstream?

Mr. PETTY. Yes and we have done that.

Mr. YATES. So that dam is safe?

Mr. PETTY. That dam is safe.

Mr. YATES. What about the others, if the others collapsed nothing would happen?

Mr. PETTY. That is the way we have been approaching it. We have been looking at the dam and what would happen if all that water broke loose. We determine whether there is anything below it that would be harmed. If there is not, we haven't worried about it.

Mr. YATES. How many did you say there were?

Mr. PETTY. There are 22,000.

Mr. YATES. You don't have enough people to examine 22,000 dams?

Mr. PETTY. We are talking about aerial photographs.

Mr. YATES. Can you tell?

Mr. BURFORD. A good many of them are very small.

Mr. YATES. So if the dam were to collapse there wouldn't be any damage, is that what you are saying?

Mr. VAIL. A lot of them aren't any bigger than this room.

Mr. BURFORD. A lot are smaller than this room.

Mr. PETTY. They are very small with very little water behind them. When you look in an aerial photograph you see nothing below them.

Mr. YATES. Are you telling me there is only one dam you have to worry about and you are taking care of it?

Mr. PETTY. We have already taken care of the one we are worried about.

Mr. YATES. How many other high dams do you have?

Mr. BURFORD. I do not know how many——

Mr. YATES. You have 22,000 dams, and as far as the committee knows, only one of those dams was susceptible to possible rupture.

Mr. PETTY. No, possible danger. We had about 350, 400 that required some maintenance, and we have been able to do that.

Mr. YATES. That is all that require maintenance?

Mr. PETTY. The maintenance will be a continuing problem and there are some funds in here for that. But it is not a great amount.

HEALTH AND SAFETY OF FACILITIES

Mr. YATES. Well, another question comes to my mind. If we don't have to worry about the dams as far as possible damage to life, health, or property of people in the vicinity, do we have to worry about any of the structures on public lands as subjecting the people who are using those structures to possible danger, like bridges and things of that sort?

Mr. PETTY. We will try to take care of that where we can see a danger.

Mr. YATES. I am sure you will. But, how many bridges do you manage, and how many bridges are used by people on the public lands?

Mr. PETTY. There can always be the danger that someone could be below that at any one time.

Mr. YATES. Well, but last year the Secretary raised a question about health and safety in the national parks. There was no comparable question raised with respect to the public lands. We are raising it now.

Mr. PETTY. With regard to the dams the health and safety problem——

Mr. YATES. You assure this committee we don't have to worry about the dams?

Mr. PETTY. That is our best information from the inspections that we have done. We do not see a serious problem.

Mr. BURFORD. While you were out, we discussed some of the bridges on O&C lands that had been inspected and maintained.

Mr. YATES. In other words, you are taking care of the O&C lands. What about the rest of the States?

Mr. BURFORD. I do not know how many bridges we have.

CONCESSIONS ON PUBLIC LANDS

Mr. YATES. What about roads, bridges and structures of various kinds? Do you, on the public lands, have concessions and insurance?

Mr. PETTY. We have concessions, particularly along the Colorado River.

Mr. YATES. All right. What is the condition of those concessions?

Mr. PETTY. They are in pretty fair shape, because that is the concessionaire's responsibility.

Mr. YATES. Well, that may be. You know, it was the concessionaire's responsibility in the national parks too, and a great many of them were in very bad condition.

Mr. PETTY. Well, the concessions that BLM has are primarily small. We have five large ones. What we consider large is certainly small by Park Service standards. Those agreements have been renegotiated within the last 3 years. Part of the renegotiation of the agreement was to get the concession back in first class condition. They have either done it or are in the process of doing it.

Mr. YATES. How do you know that, have you inspected them?

Mr. PETTY. Oh, yes. The compliance staff goes around and visits them. I have only been to a few of them personally. Insofar as health and safety goes, I can see no health and safety problems in the few that I have been to.

ACCIDENTS ON PUBLIC LANDS

Mr. YATES. How many accidents took place on the public lands last year?

Mr. PETTY. We wouldn't have the statistics on that.

Mr. YATES. Aren't they reported to you?

Mr. PETTY. No.

Mr. BURFORD. Sometimes they report them to the county sheriff.

Mr. PETTY. Most of the time.

Mr. YATES. Never to you?

Mr. PETTY. We would have some but certainly not anything that would indicate the total magnitude. A lot of them would go unreported, too.

Mr. YATES. I should ask you how many crimes took place last year on lands you manage.

Mr. PETTY. That also would lie primarily with the local jurisdiction, although that is not to say we don't have a large crime problem on the public lands in certain areas.

RECREATION FACILITY MAINTENANCE

Mr. **Yates**. How many camping sites do you have? You must have some.

Mr. **Burford**. We have some formal camping sites and innumerable camping sites where people pull off the road and camp because it is vacant land.

Mr. **Yates**. Right. How many formal camping sites?

Mr. **Burford**. We have 436 developed recreation sites.

Mr. **Yates**. Okay. What is the condition of those sites?

Mr. **Burford**. We have requested a maintenance increase of $277,000,

Mr. **Yates**. Is that enough?

Mr. **Burford**. We think it is.

Mr. **Yates**. How many of them need maintenance, or increased maintenance?

Mr. **Burford**. I do not know if we have a figure on the numbers, the ones we are going to work on this time around.

Mr. **Petty**. Virtually all will require some maintenance through the year. We try to use the caretaker, who is there during the summer, to do the minor maintenance.

Mr. **Yates**. Do you have to worry about purity of the drinking water?

Mr. **Petty**. Yes.

Mr. **Yates**. You do. All right. How many of those sites do you worry about that?

Mr. **Petty**. We have a good many where water is tested. We do have to close them down sometimes because of vandalism. We will clean that up. Operation and maintenance funds are used to clean this up, but I believe we have adequate money in our budget to do that.

Mr. **Yates**. Well, how many of them have bad water?

Mr. **Petty**. If we have bad water we will close it.

Mr. **Yates**. How many have you closed for bad water?

Mr. **Petty**. At the moment, I know of none. We have had to close the Red Rocks outside of Las Vegas two or three times for short periods while we cleaned up the water there.

Mr. **Yates**. What about sanitation and sewage facilities, are they in need of any rehabilitation or maintenance?

LOWER COLORADO RIVER FACILITIES

Mr. **Petty**. The funds we have in this budget this year for recreation construction will cover the two really bad situations we have on sanitation. They are both on the Lower Colorado River.

Mr. **Yates**. Where is the Lower Colorado, in which State?

Mr. **Burford**. It is between Arizona and California.

Mr. **Yates**. Is that an important recreational area?

Mr. **Burford**. Yes, sir, there is a lot of usage from Los Angeles. In the summer, there is a lot of boat usage on the Lower Colorado. There are boat races, fishing, and camping. We had a large area of unauthorized use out there which has almost been corrected. A lot of fishing shacks were built on Bureau land with no permit or anything else. It was a very emotional issue to get the shacks removed. But there were a lot of other people who wanted the use of the adjacent riverbanks for launching boats and fishing. These people had built some very expensive homes on Bureau land. I think that particular site is pretty well cleaned up with the concurrence of the local communities.

Mr. YATES. Do you ever lease such land sites for construction of homes?

Mr. BURFORD. I think we have some leases there. I know we have some leases for construction of boat docks.

Mr. YATES. Is this for concessions?

Mr. BURFORD. Yes, but I am not sure about the leases as far as homesites are concerned.

Mr. PETTY. We do have a few leases on homesites, but they are where the homes were built on the public lands without our knowledge. Then until such time as we have a specific use for that land, leases will be issued. That was true along the lower Colorado for many, many years.

Mr. YATES. Do you charge a rental fee?

Mr. PETTY. Yes we do charge rentals.

Mr. YATES. So, in effect, you sanction them?

Mr. PETTY. We sanction until such time as a public use is identified and we are prepared to do something with it as we are now in the lower Colorado River, at which time the leases are cancelled.

PRINCIPAL RECREATION AREAS

Mr. YATES. What other important sites do you have for recreation, comparable to the Lower Colorado?

Mr. PETTY. There is the California Desert.

Mr. YATES. California Desert. Do you still have trouble with the dune buggies?

Mr. PETTY. Yes.

Mr. YATES. What are you doing about it?

Mr. BURFORD. We are controlling those races; and, as Mr. Hastey says, we are giving them a sandpit to play in. In a lot of the other areas, we have turned over certain areas for their use and to keep them out of other fragile environments.

Mr. YATES. Well——

Mr. BURFORD. We also have the Little Sahara Sand Dune area in Utah, the Missouri Wild and Scenic River, and White Mountains in Alaska, in addition to the California Desert and Lower Colorado River.

Mr. YATES. Would you like to stay there overnight in any one of these? Do you know what the facilities are like there?

Mr. PETTY. There are many of them I would like to stay overnight in, and have stayed overnight in.

Mr. YATES. Are there any you wouldn't like to stay overnight in?

Mr. PETTY. There are probably some.

Mr. YATES. Why wouldn't you like to?

Mr. PETTY. They are not up to the standards that I would like. In the first place, I am not an RV enthusiast. I do not like campers. I do not like outdoor living. Other people do.

Mr. YATES. Well, the question is then, should those sites be maintained to accommodate people like you?

Mr. **Petty**. I think we have to accommodate all the public. Some people enjoy that, so we need facilities for that.

Mr. **Yates**. Well, but I would think that part of the reason you don't like them is because—maybe I shouldn't speculate on why you do or don't like them.

Mr. **Petty**. I just don't like the outdoor life.

Mr. **Yates**. I can understand that.

Mr. **AuCoin**. How long have you worked at the BLM?

Mr. **Petty**. I have worked for BLM since 1961, but I still don't like the outdoor life.

Mr. **Yates**. Twenty-one years of cruel and unusual punishment?

Mr. **Burford**. There are some who don't want any facilities at all.

Mr. **Yates**. On the recreation sites?

Mr. **Burford**. Yes, they would just rather go out and camp some place with no amenities.

Mr. **Yates**. No amenities at all?

Mr. **Burford**. Sure.

Mr. **Petty**. That is your wilderness issue.

Mr. **Yates**. I suppose it is. But when you have formal campsites, usually you want to have water and sanitation.

Mr. **Petty**. Water is supplied in places where they need to cook. In areas where you have your trailers we have to have holding tanks for sewage disposal and the means to get the sewage out of there.

Mr. **Yates**. $277,000 is enough money to take care of all your needs for this next year?

Mr. **Burford**. That is the increase, sir.

Mr. **Yates**. How much is available?

Mr. **Burford**. The total is $3.6 million.

Mr. **Yates**. That is your maintenance budget?

Mr. **Burford**. That is for recreation maintenance. There are 44,000 miles of roads on the public lands, 5,000 miles of trails and 250 major bridges.

WATER RIGHTS FILINGS

Mr. **Yates**. State water rights filings will be reduced by 24 percent, your justification says. What does that mean? The states aren't going to file for water rights, or what?

Mr. **Burford**. In some cases permittees and users are going to file for them. Several States have had an open period of time and a lot of those filings have been made. So, it will just be updating some of them.

RECREATION MAINTENANCE BUDGET

Mr. **Yates**. Before I leave that previous subject, you are telling the committee that the committee doesn't have to worry about the health and safety of people who use the public lands. That your $3 million-plus budget for recreation maintenance is adequate to take care of whatever has to be done next year?

Mr. **Petty**. We believe it is adequate to provide a good experience for the recreation public on public lands. I am certain there always will be some members of the public who would like more than we can provide. Others would like to see nothing done. On balance, I think we have a reasonable budget.

Mr. YATES. But you tend to side with those who would like nothing there?

Mr. PETTY. I tend to side with those who like four walls, a roof, a kitchen, and a hot bath.

Mr. BURFORD. You are not going to get your wishes. He wants the MGM Grand Hotel to be repositioned on the banks of the Lower Colorado River.

Mr. PETTY. I do not own a sleeping bag for example, nor do I intend to.

WATERSHED TREATMENT PROJECTS

Mr. YATES. Now you are reducing land and watershed treatment by almost 50 percent from the 1981 level. Why are you doing that?

Mr. HILDEBEIDEL. Where are you reading from, sir?

Mr. YATES. We are reading from page BLM-102.

Mr. BURFORD. That is a decrease of 2,200 acres.

Mr. YATES. Right. Why the decrease?

Mr. BURFORD. I am assuming that is what we had requests to treat this year, and that is the amount we figured we could fit within our budget.

Mr. YATES. Will the reduction in quantitative data from water inventory affect your grazing EIS schedule?

Mr. BURFORD. No.

Mr. YATES. If not, how are you going to adjust for the reduced amount of data?

Mr. BURFORD. For one thing, we are using existing data and we are setting up baselines and going into a monitoring system which has met with considerable approval by recognized range management experts outside the Bureau, outside the livestock community from the universities and from the rangeland, from the Range Society, and from soil conservation districts.

This requires less emphasis on compilation and collection of one-time data, and puts more emphasis on watching trends of range production.

ACID RAIN MONITORING

Mr. YATES. You have $65,000 for acid rain monitoring. What kind of a project is that?

Mr. BURFORD. Do you know that one, Del?

Mr. VAIL. This is a coordinated effort with the States where we have measuring capability scattered throughout the public lands to measure the amount of acid rain that is occurring.

Mr. YATES. Have you been measuring it?

Mr. VAIL. Yes, sir, this is about the third year that we have been measuring it.

Mr. YATES. Where do you find most of the acid rain?

Mr. VAIL. We generally find that it occurs east of metropolitan areas.

Mr. YATES. Well, I have the impression from what I have read that most of the acid rain is up around the State of Maine.

Mr. VAIL. Yes, sir.

Mr. YATES. The problem not only affects the New England states but spills over into Canada.

Mr. VAIL. We are coordinated with that whole effort. Of course, we are generally in the 11 Western States and we are not finding anywhere near the magnitude of what they are finding up in Maine.

Mr. YATES. Do you find any acid rain, for example, in the areas of the four corners where you have the power plants?

Mr. VAIL. There is some there.

Mr. YATES. Well, have you enough data to indicate that there is a relationship between the exhaust from the power plants and the presence of acid rain in the area?

Mr. VAIL. No, sir. As I said, this will be the third year we have been measuring. We don't have enough data to draw that type of conclusion.

Mr. BURFORD. We are faced with something rather peculiar in some of the areas of alkaline soils where a little acid rain might help things considerably in changing the pH of the soils.

Mr. YATES. Can you control it?

Mr. BURFORD. Well, we don't know—the same holds true on what Mr. Vail said. We don't know enough about whether we are going to get a beneficial result or whether we are going to get an adverse result. We just don't know.

Mr. YATES. Well, we know acid rain is certainly hurting the lakes and fish, don't we?

Mr. BURFORD. Well, you can get into arguments on that both ways. Some say it is hurting it, some say it isn't. Some say it comes from here, some say from there. If we assume some of it comes from power plants, if we could drift all those acidic components over shale, we might improve that soil considerably, as it is an alkaline soil, and does inhibit plant growth because it is so salty.

Mr. YATES. I didn't have the impression that acid rain was beneficial in any place.

Mr. BURFORD. I know, but there are some results that are beneficial. We don't know to what extent. Some soils respond to treatments with different pH.

Mr. YATES. I know. In connection with a pine tree I have in a pot, I am supposed to use an acid-type plant food product.

Mr. BURFORD. That could be vinegar.

Mr. YATES. Yes, something like that. Well, I really don't think that watering a plant with an acid-containing material justifies acid rain.

Mr. BURFORD. In some places it might. I am talking strictly about the shale.

Mr. YATES. All right. I am sure the Canadians would love that.

Mr. BURFORD. The Canadians could have a little self-interest in perpetuating that myth and trying to sell hydroelectric power of which they have a surplus.

IMPACTS OF ENERGY DEVELOPMENT

Mr. YATES. Will the levels of energy development you are proposing for 1983 impact wildlife habitat?

Mr. Burford. To a certain extent, development of energy will impact any kind of habitat, whether it be wildlife, endangered species or livestock.

Mr. Yates. Sure, we just talked about acid rain.

Mr. Burford. One thing one should realize is that there is only a very, very small amount of that surface uncovered and destroyed at any one time as a coal mine works through a section of ground. They are required to rehabilitate the land behind them.

We have some adverse effects on wildlife in the development of oil and gas fields in Wyoming and the overthrust belt and some of the areas there. The energy companies have contributed several large amounts of money to study the impact on wildlife, and the ways that those impacts can be mitigated. I think one was negotiated almost a year ago. Some of the energy companies in Wyoming were putting up about $1 million on studies to the Wyoming Fish and Game Commission to study what the impacts were and what could be done.

There has been some concern voiced in Colorado, if there is oil shale development in great quantities, as to what that effect would be on what is the largest migratory mule deer herd in the United States. Those things will be part of any environmental impact statement which will have to be taken into consideration before any large-scale leasing can take place.

We are finding, through observation, that deer are smart enough to vary their migration patterns a mile here, a mile there, to get out of the way. They have changed in the past, and they probably will change in the future; but it is a resource that we are committed by FLPMA to protect as we are committed by FLPMA to allow energy development.

CULTURAL RESOURCES

Mr. Yates. What role did the Park Service and Smithsonian have in granting permits for cultural resources under your program of cultural resources and natural history management?

Mr. Vail. We refer the applications we receive to the Park Service. They're the clearinghouse for the Department of the Interior. We still administer them, and we suggest stipulations, but they are the experts and we defer to them.

LEAD AGENCY ON ACID RAIN

Mr. Yates. Incidentally, on acid rain, which is the lead Agency for the Government? Is it you?

Mr. Vail. It is the Environmental Protection Agency.

CULTURAL PERMITS

Mr. Yates. Are these permits required before energy development can take place?

Mr. Vail. Generally, the permit that is applied for is for salvage or study by academia. If there is a site located before development, they are permitted that way also. But generally, the permits we get are for existing sites that are only under study or being salvaged or researched.

Mr. **Yates**. Do you perform field checks on the outstanding permits?

Mr. **Vail**. Yes, sir.

Mr. **Burford**. How many archeologists do we have, 244, I think at present?

Mr. **Vail**. Approximately.

Mr. **Petty**. We have about 80 archeologists on board right now. It increases in the summertime.

Mr. **Yates**. It is indicated in your justification that your work is on 139 threatened cultural and natural history sites. Is that the total number of sites requiring protection?

Mr. **Burford**. Well, in the paragraph below, I think you will see there are 1,000 sites and areas we take an occasional look at.

Mr. **Yates**. Do the 1,000 sites require protection, and are you giving it to them?

Mr. **Burford**. If we provide the kind of protection that might be necessary in some instances, that would require 3 million man years. We cannot give that type of protection to all the sites in the public lands.

I think that in some cases, through our identification of sites, we actually do a disservice to the site and perhaps to the independent public because the minute the Bureau begins rehabilitating ground that has been burned off, or areas where for some reason we locate a site, we put up a marker that says keep off the site. It is a flag. What it does is allow the people who are so inclined to identify the site.

They come in as we leave and start digging and trying to collect those artifacts. In some instances I think we actually should keep those locations practically secret. I do not think we are allowed to under rules and regulations and laws, but it does flag the site.

I have heard people talk about some burn areas in Idaho where someone will locate a burial site or something out in the plains and mark it so that the drills will not go over it. The people go along and look where the drills miss and scratch and search for artifacts because they figure that is the reason the drill was not sent over it.

How you address that kind of a problem, I do not know. But I do know that it is a problem. We cannot protect 370 million acres from people intent on vandalizing the artifacts of past civilizations. There is no use in kidding anybody. We can tell you we can do our best to take care of the really significant sites we know about. We will give them the maximum protection we can.

But there are millions of miles of canyons where there may be cliff dwellings, and where pots and pans may be buried. Sometimes one of our people gets up and down one of those canyons, maybe no more often than once a year. It is a vast country.

WILDERNESS STUDY MINERALS ASSESSMENTS

Mr. **Yates**. Is the amount of $12.1 million adequate for wilderness management?

Mr. **Burford**. Yes.

Mr. **Yates**. Will the information you develop through the resource inventory and assessment system be adequate for basing final decisions on wilderness recommendations?

Mr. **Burford**. Sandra, would you care to go through that, as to whether it is adequate?

Ms. **Blackstone**. This minerals data is only used to gain the information that goes into the resource trade-offs that are made in making the suitability-unsuitability recommendation. Subsequent to a recommendation that an area is suitable, the Geological Survey and Bureau of Mines conduct the mineral survey that is required by FLPMA. But for the purpose that it is intended, yes, the process is very adequate.

Mr. **Yates**. What about the reports by Oak Ridge and Economic Associates respecting energy resources in wilderness areas? They say they represent a very small portion of the Nation's total energy resources. Do you agree with the reports? Are you familiar with them?

Ms. **Blackstone**. I am not familiar with those specific reports.

Mr. **Yates**. Would you like to take a look at them and give your impression for the record?

Ms. **Blackstone**. Was their conclusion based solely on energy resources?

Mr. **Yates**. Yes. Take a look at them and give the committee the benefit of your expertise.

[The information follows:]

Reports on Energy Resources in Wilderness Areas

Both the Oak Ridge and Economic Associates reports were based upon an evaluation of the regional geologic settings of the various WSA's as provided by existing literature. Such evaluations lack the intense site-specific analysis necessary to estimate oil and gas and other energy mineral potential. Particularly with regard to oil and gas, small areas may produce large amounts of resources. Therefore, our decisions regarding the suitability of such areas for wilderness designation should be based on the site-specific analysis of each area. BLM's planning process will address the energy and mineral resource potential, and any areas recommended as suitable by BLM will be subject to the Geological Survey/Bureau of Mines Mineral Inventory Report. In addition, some WSA's may be very favorable for the occurrence of non-energy minerals important to the Nation. These were not addressed adequately by the two reports.

VISITOR COMPLAINTS

Mr. **Yates**. Do you get many complaints from visitors in your recreation areas?

Mr. **Burford**. Do we have a method of keeping track of complaints?

Mr. **Petty**. We have so few complaints on recreation areas that we do not keep them. Most of the complaints concern the ORV use which is a type of recreation rather than a recreational area.

Mr. **Yates**. Do you feel you have successfully resolved the recreation problems you had in the the California Desert?

Mr. **Burford**. I think we are approaching resolution on it.

Mr. **Vail**. As you know, we have completed the plan. Of course, implementation is going to occur over quite a period of time. The plan places constraints on certain people, so there are going to be complaints.

Mr. **Yates**. How much money is in the budget to take care of the California Desert Conservation Area?

Mr. **Burford**. I think that is one we will have to look up and send to you, sir.

Mr. **Yates**. All right.

[The information follows:]

Budget for California Desert

In fiscal year 1983 we plan to allocate $7 million for our management program in the California Desert. This amount includes $2.2 million for recreation management. The balance will be used to manage the other resource programs within the Desert.

CADASTRAL SURVEY PROGRAM

Mr. **Yates**. You want an increase of $800,000 for the cadastral survey program. Are you going to have an increase in cadastral surveys on Forest Service-administered land?

Mr. **Petty**. No, sir. The Forest Service proposed legislation which would be effective in 1984.

Mr. **Yates**. What is your estimate as to the number of acres you are going to be able to survey under this budget in fiscal year 1983?

Mr. **Burford**. We estimate 3.5 million acres in Alaska and 1.6 million acres in the Lower 48.

Mr. **Yates**. Last year you thought you could survey a total of 7.5 million acres, now you are down to 5.1 million acres.

Mr. **Petty**. The number of acres we are surveying with the given amount of money is decreasing because the costs are going up so dramatically.

Mr. **Yates**. How important is the survey program?

Mr. **Petty**. Well, it is very important but we try to keep the survey program in balance with the other programs.

Mr. **Yates**. Should the committee put more money in the bill for your program?

Mr. **Petty**. We are providing an increase of $800,000 in the budget, Mr. Chairman. As we say in the justification, $400,000 will go into increasing the number of Native allotments.

Mr. **Yates**. I do not think you have answered my question.

Mr. **Petty**. To the best of my ability, Mr. Chairman, I have answered your question. We believe we have an adequate budget for cadastral surveys considering the budget constraints under which we work.

Mr. **Yates**. Considering the budget constraints, all right. So, because of the budget constraints, the program is going to have to be stretched out longer, is it not?

Mr. **Petty**. The cadastral survey program will never be finished.

Mr. **Yates**. It will never be finished?

Mr. **Petty**. As we progress—some areas will never be surveyed.

Mr. **Yates**. Right.

Mr. **Petty**. Other areas are going to have to be surveyed repeatedly over the years, because the survey markers get lost.

Mr. **Yates**. How many acres are you going to have to survey?

Mr. **Petty**. I would not even know how to estimate the number of acres. As development progresses, some areas have to be surveyed. Some areas will never be surveyed. We have a large survey problem in Alaska which this budget does address.

Mr. YATES. There was an investigative report from the House Investigative Staff which indicated you have to survey at least 50 million acres.

Mr. PETTY. Yes, sir.

Mr. YATES. Do you believe that?

Mr. PETTY. Their figure was based upon some estimates which I was never privy to. I would say we will survey 50 million acres, much more than that in time.

Mr. YATES. How much time?

Mr. PETTY. It depends upon several factors.

Mr. YATES. The amount of money that is available.

Mr. PETTY. We have a tremendous survey load, we know, in Alaska.

Mr. YATES. I know you have a tremendous survey load. There is a certain minimum of acres that ought to be surveyed. The question is whether 5 million acres is the minimum that should be surveyed. That is all the money you have asked for, the amount of money that will permit you to do 5 million acres. Should you be getting more money to do more acreage? Is the need so important that the committee ought to go over the budget to do that?

Mr. BURFORD. We do not think so.

Mr. YATES. Okay, there you are.

Mr. PETTY. Let me answer this further. As a result of your Investigative Committee's report we did form a council through which all Agencies have put their survey needs in priority order. This budget does take care of their priority requirements except for the Forest Service, which largely takes care of its own needs.

ADEQUACY OF THE 1983 BUDGET REQUEST

Mr. YATES. All right. You see what happens. Mr. Watt will come back as Secretary, or another Secretary will come back at a later time and write a report as Mr. Watt did, which says: "We have not been doing well enough to care for and manage the great wealth of our land.

"As we took office in January there was too much air and water pollution. The National Parks have been allowed to deteriorate. Ranges and refuges have been neglected. Our multiple use lands have not been managed properly for the taxpayers." The next Secretary is going to say the same thing.

When Mr. Watt appeared before us last year and made those statements about the condition of the parks, I told him that the committee had gone over the amounts that had been requested of us by the administrators time and again. I told him it was not the fault of the committee, it was the fault of the administrators because they were bound by the direction of OMB to tell us that the budget was hunkey-dorey, that it was adequate for all the purposes, and we all knew darn well it was not.

Unless you tell us, based on your professional expertise, what has to be done there is nothing we can do to help you. You have said that the survey program is a very important one. I have asked you whether you needed more money for that program. The Director has said no.

Do you still stand by your answer?

Mr. BURFORD. Yes, sir.

Mr. YATES. Okay. Are there any parts of the BLM budget request that you feel are inadequate

Mr. BURFORD. No, sir. I think this is a good, well-balanced budget which addresses the statutory requirements under which we operate. And I think we can do a good job under this budget.

I would say, Mr. Chairman, that I assume that anyone can find places to spend more money.

Mr. YATES. It is not a question of that, Mr. Director.

Mr. BURFORD. Yes, sir, it is.

Mr. YATES. No, it is not. It is a question of what important work has to be done that is being postponed.

Mr. BURFORD. I do not think that anything important that has to be done is being postponed.

ALASKA NATIVE ALLOTMENTS

Mr. YATES. All right. In your 1982 request you said you planned to do 370 Native allotments. Now you want to do only 200. Any reason for that? Lack of funds?

Mr. BURFORD. We did 200 in 1982.

Mr. YATES. Yes.

Mr. BURFORD. We are estimating 230 in 1983.

Mr. YATES. How are you betting, Mr. Director, that Senator Stevens will look at this budget? Do you think he will be putting more money into it than you are asking for? What is your guess, Mr. Gorrell?

Mr. GORRELL. I do not have a guess on that right now.

Mr. YATES. I can tell you what he is going to do.

Mr. GORRELL. Please do.

Mr. YATES. I will, after he acts.

FIREFIGHTING SUPPLEMENTAL REQUEST

You want $60 million more for a firefighting supplemental. Do you need that money?

Mr. PETTY. That money has already been spent.

Mr. YATES. Does that mean you need it?

Mr. PETTY. Yes, sir, we desperately need it.

Mr. YATES. Okay. Is it spent reasonably?

Mr. PETTY. We hope so. We had a very bad fire year.

Mr. YATES. Did you?

Mr. PETTY. We are always looking for improvements. We believe that $60 million was spent wisely.

Mr. YATES. Now the Inspector General has an audit report saying that your computerized inventory system was unreliable; unusable to detect theft or abuse; and a waste of time and effort.

You say you have plans to replace the existing system with a new system. What does that mean?

Mr. PETTY. He is addressing the inventory system at the Anchorage warehouse. We have a system in place at Boise, Idaho, which the Inspector General is just looking at and which, to our knowledge, will meet all the IG requirements. We are installing that identical system in Alaska. We are moving the Anchorage warehouse into Fairbanks and centralizing the warehouse with the warehouse there and putting in the Boise system.

Mr. YATES. You are putting in a whole new system rather than improving the old one?

Mr. PETTY. That is right, it will not be a redo of the old system. We will take the Boise system.

Mr. YATES. Because the old one is not salvageable?

Mr. PETTY. We have a good system at Boise, so we might as well use it in Alaska.

Mr. YATES. Is there adequate money in the budget to take care of the security?

Mr. BURFORD. Security of the warehouse?

Mr. YATES. Fire.

Mr. BURFORD. Yes.

Mr. PETTY. I think so.

Mr. YATES. Okay.

Mr. BURFORD. That Anchorage move entails moving everything up to Fairbanks on an Army base where they will be more secure.

CONSTRUCTION WITH FIREFIGHTING FUNDS

Mr. YATES. How many buildings have you built with firefighting funds?

Mr. PETTY. In Alaska we have built several. I do not have a count as far as individual buildings, but we have quite a few buildings that have been constructed with firefighting funds.

[The information follows:]

BUILDING CONSTRUCTION WITH FIREFIGHTING FUNDS

Temporary facilities at approximately 37 locations in Alaska have been constructed with firefighting funds. These structures are shelters and supporting facilities in isolated locations. Such facilities are used solely by firefighting crews, and include sleeping quarters, kitchens; showers; and storage structures for fuel, equipment, and supplies.

These structures are generally of plywood and prefabricated construction and are used only during the fire season. At the end of the fire season, they are secured, emptied of most supplies and fuel (except partially-empty fuel containers that cannot be safely transported), and left untended for the winter.

In addition to the structures in Alaska, foundations for 35-40 trailers at the Boise Interagency Fire Center have been built with firefighting funds.

Mr. YATES. Why do you use the firefighting money for this?

Mr. PETTY. We have used the firefighting money primarily in pre-suppression—where we have a need solely for fire. It is only manned during the fire season. Only firefighters use that building and stay there. We do not have any other use for it.

Mr. YATES. Why do you not ask for the money in your construction fund rather than firefighting?

Mr. PETTY. These are not the normal type buildings that are built for office space or something of that nature.

Mr. YATES. But they are dormitories for your firefighters.

Mr. PETTY. They are temporary structures by and large.

Mr. YATES. I would have thought the funds should have come under the construction line item. How much of your firefighting money was used to buy aviation fuel for nonfirefighting equipment?

Mr. **Petty**. The IG reported that was done. To our knowledge that was not going on. He did not determine that either. We do not know how much if any of that was used.

Mr. **Yates**. Why would the IG say so?

Mr. **Petty**. Well, we did not have the proper controls. Since he brought that to our attention, we hope we have gotten control over that. He has now advised us he is satisfied with the controls.

Mr. **Yates**. We are going to have some questions for the record. We would ask you to reply for the record.

CLOSING REMARKS

I think with that, unless you want to say something in conclusion, we will call the hearing to an end.

You have already told us the amount of money you have in the budget is adequate for all your purposes.

Mr. **Burford**. Yes, sir.

I thank you for your time.

Mr. **Yates**. I thank you for your time.

Mr. **Burford**. And consideration, I enjoyed the——

Mr. **Yates**. Experience.

Mr. **Burford**. Yes.

Mr. **Yates**. Okay.

Mr. **Burford**. I also said that about World War II when it was over with.

Thank you very much.

Mr. **Yates**. Okay, Mr. Burford. Thank you very much, all of you.

[The questions and answers follow:]

ADDITIONAL COMMITTEE QUESTIONS

RECEIPTS

Question: You are estimating a total of $19.8 billion in receipts for 1983, an increase of $10 billion over your 1982 estimate. These increases in receipts are largely based on the expanded leasing activities, plus the increase in oil and gas filing fees and rentals. However, your budget does not address the increases that could be realized if more leasing were done on a competitive basis; and if more diligent development on existing leases were pursued. What are you doing to address these issues? Will you be proposing either legal or regulatory changes to bring about reform in these areas?

Answer: The Department is examining the possibility of expanding the definition of Known Geologic Structures (KGS) through rulemaking. Such a change could increase the area available for competitive leasing. BLM is also reviewing a proposal to collect bonuses for noncompetitive leases. We do not anticipate requesting legislative change at this time.

Question: What are your estimates as to the average revenue per acre generated by competitive oil and gas leases versus noncompetitive leases?

Answer: In general, lands leased competitively generate a higher average revenue per acre than lands leased non-competitively. This is because all leasing within Known Geologic Structures (KGS's), where there is a significantly greater chance for discovery of oil and gas, is done competitively. Because of the lower risk and greater chances for profitability, the average bonus bid per acre on these leases exceeds the average filing fee expense per acre for noncompetitive leases. Rental rates and royalty rates are higher on competitive leases for the same reasons.

In FY 1981 the average bonus bid for competitive oil and gas leases within KGS's was $820 per acre. Such competitively leased lands comprise about 3.5 percent of the total, or less than 600 leases per year. Due to the much lower risk level in most cases, such leases also generate rent of $2/acre/year plus royalties, which range from 12.5 percent to 25 percent varying directly with the level of production.

Simultaneous oil and gas (SOG) leasing (about 23 percent of total leases) currently generates roughly $10.50/acre in filing fees plus $1/acre/year rental (for the first five years) plus 12.5 percent royalties. Such a return is commensurate with the additional risks assumed by the private sector.

The vast majority of leases issued currently (about 74 percent) are issued by non-competitive Over-the-Counter Leasing (OTC). This type of leasing generates roughly $.12 per acre in filing fees, plus $1/acre/year in rent and 12.5 percent royalty. Due to the low probability of discovery of oil and gas resources, these lands have relatively little value in the private market.

OIL AND GAS LEASING

Question: How many states with oil and gas reserves use noncompetitive leasing systems? Why is this?

Answer: With the exception of Wyoming and Utah, all states that have oil and gas leasing programs use competitive leasing. Wyoming has a leasing system similar to the simultaneous program, and Utah has both including a lottery type system for those tracts not bid on competitively. We have not examined the motivation behind each state's determination of a leasing system.

Question: Why should the Subcommittee approve the large-scale expansion of leasing you are proposing, with its risk or potential for environmental and other costly impacts, if the Department is taking very little action to make sure full advantage is taken of the existing program, and that the Federal Government receives its "fair share" from that or an expanded program?

Answer: An expanded oil and gas leasing program on the Federal lands is necessary to protect and enhance the development of domestic sources of oil and gas and reduce our dependency on foreign supplies that are often far less secure and far more expensive to the national economy. Additionally, the program provides significant knowledge of the resource base for future development and national security. For example, reserves that may not be developed at this time and price level may be very important in 10 years or in a national emergency.

The Bureau of Land Management, at the direction of Secretary Watt, has made substantial progress on a program to reduce the time and cost of issuing leases and to eliminate any backlogs in lease issuance in BLM and other agencies. We believe that this program can be carried out without any significant increase in environmental risks.

We do not concede that we receive less than fair market value for oil and gas leases. For the leases that are developed and can, therefore, be considered to have some value, the Bureau currently receives an estimated average return of over $220,000 per lease plus royalties on any production. We consider this to be within the range of reasonable fair market value. Even so, the Bureau and the Department are continually reviewing the program to ensure the fair market value is received. For example, we have recently increased revenues by raising filing fees for non-competitive leases and rental fees for simultaneous leases.

Question: You are requesting $21.6 million for oil and gas, an increase of $3.7 million. The Bureau plans to eliminate the backlog for lease applications by December 1982, and issue 30,000 leases up from 14,000 in 1981. How will you be able to accomplish this increase in activity?

Answer: We have streamlined our leasing procedures dramatically. One change, the elimination of qualification statements, has decreased by 15 percent the amount of time neccessary to adjudicate a lease. We plan to meet our goal of 30,000 leases in 1983.

Question: A GAO report dated February 8, 1982, raises doubts as to whether the amount of leasing can be increased significantly, due to "continuing and serious problems with the leasing system." GAO cites the poorly maintained land status records which will "make it difficult for BLM to process leases for lands already in the system, let alone handle additional leases for any newly opened lands." What is your response? How will you address the problems with poorly maintained records?

Answer: Land status records in the Bureau are maintained on paper. The difficulty in manipulating paper records for the number of transactions processed by BLM each year is awesome. BLM has pilot projects in some of the state offices for the automation of these records. The entire records system will be automated within three years. In the interim, BLM will deal with the records problem by diversion of personnel and by utilization of the records of other agencies (e.g., Forest Service).

Question: You have "streamlined" the oil and gas leasing process in several ways. One involves implementing categorical exclusions from NEPA for prelease environmental assessments. Describe the "categorical exclusion" process and how it differs from the previous environmental assessment process. How are you ensuring that proper procedures under this process are being implemented in your State offices?

Answer: BLM has a categorical exclusion from the requirements of NEPA for the issuance of noncompetitive oil and gas leases. It is used only in situations where the land to be leased is covered by a site-specific or regional environmental assessment or by a planning document which addresses oil and gas development.

The procedures for utilization of the categorical exclusion involve completion of a standard check list which results in a determination of whether additional environmental review is necessary. In most cases, the check list serves as the record of the decision that the categorical exclusion applies and further environmental review is necessary. The Headquarter's office monitors state office implementation of the categorical exclusion through normal evaluation procedures.

ALASKA LANDS

Question: You will be making several non-North Slope areas in Alaska available for leasing in 1983, under Section 1008, ANILCA. Have you complied with all the provisions of Section 1008 with regard to studies and consultation? Describe how you have accomplished these requirements.

Answer: In accordance with the ANILCA Section 1008 provisions, in 1983 two areas of public lands are scheduled to be opened to oil and gas leasing pursuant to the Mineral Leasing Act of 1920, as amended. These two areas are the Denali-Tiekel area and the TAPS/Haul Road area, both under the jurisdiction of BLM.

A call for expressions of interest for oil and gas leasing by industry and the public at large was published on April 30, 1981, in the Federal Register. The call requested comments on establishing oil and gas lease priorities for the applicable Federal lands. An analysis of the comments was prepared and was one of the factors used to establish the priority of the BLM-administered lands to be opened. The comments were generally favorable toward leasing, with high interest shown by industry.

In addition, the schedule for opening lands has been coordinated with the State of Alaska, Alaskan local governments, the Alaska Land Use Council, the Native and Regional Corporations, and the general public. State of Alaska concerns regarding coordination and adequate planning have been addressed through both the Alaska Land Use Council and the BLM Alaska State Office (ASO). A Memorandum of Understanding between the State of Alaska and the BLM ASO has been developed to fully integrate State and BLM activities concerning the ANILCA 1008 provisions. This State/BLM understanding will insure faster consolidation of State information, studies, and concerns into the land use planning studies that BLM is undertaking for each area scheduled to be opened. The land use analysis conducted in accordance with the BLM land use planning regulations (43 CFR 1601) and the National Environmental Policy Act of 1969 addresses the oil and gas potential as well as the environmental characteristics and wildlife resources which would be affected by the exploration for and development of oil and gas resources in each area to be opened.

The U.S. Geological Survey, after analysis of the available geological and geophysical data, published a notice on December 4, 1981, of the designated favorable petroleum geological provisions, including oil and gas studies (Attachment 1).

Question: How much of your 1983 program will be applied to leasing activities in Alaska? Provide a detailed breakdown, including costs and FTE's, for the record.

Answer: Our estimate of costs for leasing under ANILCA is approximately $1.6 million. We will devote about 40 FTE's to the overall ANILCA effort. The remainder of Alaska funding is for NPR-A and other oil and gas related activities. We anticipate spending $4.7 million in Alaska on oil and gas leasing in FY 1983.

Question: You plan to make more use of helicopters and airplanes in conducting field work. How much did you spend on such uses in 1981? How much is included for this purpose in 1982 and 1983? Provide details for the record.

Answer: The following amounts have been spent or are planned for helicopter and fixed wing aircraft use in Alaska:

FY 1981	FY 1982	FY 1983
$397,565	$278,201	$450,000

OIL AND GAS LEASING

Question: Last year, you reported the investigation of irregularities in the simultaneous leasing system was being turned over to the Inspector General's office. What is the current status of the investigation? What recommendations have been made for improving the system and what is the status of implementing them? What costs are included in FY 1983 for this purpose? What is the rationale for the recent changes in the regulations which were designed to address many of the irregularities and fraudulent practices originally uncovered in the investigation?

Answer: The investigation of improprieties in the simultaneous leasing program is totally under the jurisdiction of the Office of the Inspector General. To maintain confidentiality, the OIG does not provide BLM with investigative status reports unless specific findings require corrective actions on the part of the Bureau.

The OIG has made a number of suggestions relating to the security of the computerized oil and gas leasing procedure. The Bureau has corrected these deficiencies to lessen the possibility of computer fraud. BLM is not requesting any funds for the oil and gas investigation in FY 1983.

The recent changes in the regulations (February 26, 1982) were not designed solely to address any of the irregularities and fraudulent practices originally uncovered in the investigation. The changes were designed to expedite increased energy production while endeavoring to keep the cost to the general public minimal without discouraging exploration and production. One objective necessary to accomplish this goal, however, is to maximize the integrity, efficiency and cost-effectiveness of both the leasing system and the industry activity leading to development. By raising the filing fees to $75, the regulations contribute to meeting this objective. As the result of raising the fees, some individuals and small firms may be discouraged from entering the simultaneous oil and gas lease drawings. In recent years, huge increases in the number of casual speculators seeking leases, caused by major worldwide oil price increases coupled with the low filing fees, have contributed to inefficiencies and fraud in the leasing system. One effect of an increased filing fee is to lower the incidence of casual speculation and multiple filings that contributed to fraud in the past.

GEOTHERMAL

Question: Your request for geothermal is $2.8 million, an increase of $0.6 million. Describe the joint approach to pre-lease environmental reviews you have worked out with the Forest Service.

Answer: The Interagency Agreement on geothermal leasing among BLM, FS, and the Mineral Management Service (12/81) requires that a single environmental assessment document be used by both BLM and FS in making their respective leasing decisions. BLM and FS have compatible philosophies on the level and strategy for pre-lease environmental reviews, but we have no specific joint procedural approach at this time.

Question: What program changes have you instituted to avoid the situations the Hunt family were involved in.

Answer: No program changes were instituted because, after a thorough investigation, no problem was found to exist.

OIL SHALE AND TAR SANDS

Question: Your request for these programs is $4.5 million, an increase of $.9 million. Why are you doing two prototype leases in FY 1983 rather than four as planned last year? What is the estimated cost per prototype lease?

Answer: The FY 1982 estimates were made during the last administration when up to four tracts for prototype testing were being studied as alternatives to a permanent program. We have decided to complete the 1973 Oil Shale Leasing Prototype Program. Since only four leases were issued in 1974, out of six possible prototype leases considered in the prototype EIS, the decision was made to lease one or two more prototype tracts. This will enable us to use the results of the oil shale prototype program analysis in the development of a permanent program.

It is difficult to provide a precise cost breakdown per prototype lease. There is an initial cost of program start-up that is relatively fixed, whether it is for one lease or ten leases. However, we would roughly estimate an average cost per lease of $180,000. This estimate includes those costs incurred after all land use planning and NEPA Compliance has been completed. It includes those costs associated with lease sale, adjudication of lease terms, stipulations, and lease issuance.

Question: What were the results of the call for expression of interest in 6 potential lease tracts, due for response on March 22?

Answer: We received eight responses from eight firms in the call for expressions. Four of those responses were positive expressions of interest in two of the six tracts.

Question: Last year, you requested an increase of over $1.0 million to lead up to preparation of the environmental impact statement for tar sands leasing in FY 1983. Why is the base for this activity shown as only $222,000? How much are you actually spending in FY 1982 for the activities listed in last year's justification (preplanning, development of criteria, tract delineation and collection of baseline data)?

Answer: In FY 1982 the appropriation provided $3,616,000 for the oil shale and tar sands programs. These are both new, emerging programs subject to change based on developing legislation, regulations, and policy. Because of this volatility, workload and associated base funding for these programs have changed.

Since submission of the FY 1982 Budget Justifications, two major decisions have been reached that have affected the allocation of FY 1982 funds in this account. One decision involved tar sands, the other oil shale.

On November 16, 1981, President Reagan signed into law the Combined Hydrocarbon Leasing Act of 1981. This Act cleared up most of the problems that had delayed the leasing of tar sands for the past 16 years. At the time the FY 1982 budget was submitted, the Department was prepared to move forward without a legislated solution to the administrative problems that had been delaying tar sands leasing and to begin leasing during FY 1983. With the passage of this legislation, it was deemed prudent to delay the first lease sale for one year pending the development of new regulations.

On the same day the President signed the tar sands legislation, the Department approved a new strategy for the future development of Federal oil shale resources. This new strategy required the immediate initiation of work on EIS's for additional prototype leasing and for regulations governing the permanent program. In addition, preparatory work was necessary for land use planning, with an accompanying EIS for the permanent leasing of oil shale. It was this large unprogrammed need in oil shale coupled with the delay in the initiation of tar sands leasing that accounted for the drop in tar sands funding during FY 1982.

BLM does not monitor cost data by preplanning, development of criteria, tract delineation, and collection of baseline data. These activities make up subparts of the planning/environmental assessment work activity. The Bureau collects cost data on planning and environmental assessment work as a whole, in addition to other activities carried out in the tar sands program. These activities and their costs are listed below:

Activity	Cost ($000)
Environmental Impact Statements	$129
Environmental Assessments	18
Management Framework Plan Amendments	22
Studies	31
Leases Issued	52
Compliance Checks	14
Geologic Energy Minerals (GEM) Assessment	4
Total	$270

ENERGY OFFSHORE

[Since BLM's March 30 hearing, a number of changes affecting the OCS program have occurred in terms of the 5-year schedule, receipts, and the administration of the program within the Department. The following answers reflect the current status of the program, with the exception of the reorganization which moved BLM's OCS program into the new Minerals Management Service.]

Question: You are requesting $44.0 million for energy offshore, an increase of $4.1 million and 55 FTE's. The December GAO report on the new program also reiterated an opinion voiced about the acceleration of leasing in other areas: that "the magnitude of increased participation by industry will be more closely tied to the economics of oil and gas development and the predictability of the leasing schedule than to accelerated offerings of offshore lands." What is your response to this assertion, in the case of OCS leasing?

Answer: Of course, the level of participation by industry is affected by the economics of oil and gas development. Also, one of the purposes of publishing a lease schedule is to provide industry, as well as affected State and local governments and the public, with an established timetable by which planning can occur. The major purposes of the accelerated and streamlined program are to make high potential areas available for leasing and exploration and to allow various and unique exploration theories to be tried by those energy firms willing to submit sufficiently large bids. We expect not a vast increase in leasing activity but rather improved efficiency of exploration and development investments and earlier discoveries of oil and gas.

We have requested a budget for offshore energy that is based on the costs of preparing for more sales involving larger areas. The BLM budget is affected more by the size and frequency of offerings than by what has been or is actually leased.

Question: How do the experiences in the two most recent sales (in the Atlantic and Gulf of Mexico) relate to this assertion? How did the bids compare to the original estimates?

Answer: We do not believe that the results of sales 59 and 67 are especially useful in illustrating a relationship between the economics of oil and gas development and the level of industry participation. The results of Sale 59 and Sale 67 were variable in relation to the estimated and actual bonuses. However, although no one is certain what will actually be leased, estimates are made on our best estimate of what will be leased; and the budget is based on these estimates accordingly.

The estimated bonuses compared to the actual bonuses for the two most recent sales are shown below:

	Estimated Bonus	Actual Bonus	Bids Received
Sale 59 (Mid-Atlantic) 12/81	$3.6 billion	$ .3 billion	240
Sale 67 (Gulf of Mexico) 2/82	$ .8 billion	$1.2 billion	240

Question: What percentage of available tracts were bid on? What is the comparable figure for all FY 1981 sales?

Answer: Information on percentage of tracts bid on and comparable FY 1981 sales is shown below:

Percentage of Tracts Bid on in Recent Sales

Sale	Sale Date	# of Tracts Offered	# of Tracts Bid On	% of Tracts Bid On
59, Mid-Atlantic	12/81	253	98	39%
67, Gulf of Mexico	2/82	234	137	59%
FY 1981 Sales				
55, Gulf of Alaska	10/80	210	37	18%
62, Gulf of Mexico	11/80	81	74	91%
53, California	5/81	111	81	73%
RS-1, Gulf of Alaska	6/81	175	5	3%
A66, Gulf of Mexico	7/81	212	162	76%
56, South Atlantic	8/81	285	54	19%
60, Lower Cook Inlet	9/81	153	13	8%

Question: Are you considering revision of your estimates of receipts for 1983 in light of these experiences?

Answer: On April 14, 1982, OMB adjusted the estimates of receipts. For FY 1983, the bonus estimates were lowered by $400 million to reflect the cancellation and postponement of Sale 75 and Sale 73. In addition, estimated bonuses were lowered by $1.9 billion because of the uncertainty in the economy and questions about the health of the financial market. The revised estimate is $15.7 billion, down $2.3 billion from the former $18 billion estimate.

Question: In his announcement of the program, Secretary Watt stated his intention to "continue the excellent environmental record of the OCS program." How will the environmental review process be carried out under the new plan? How does that compare to the process used in the past?

Answer: For the first area-wide offering in a planning area, an EIS will be prepared to assess the effects of oil and gas activities that might result from this offering and to examine the cumulative effects of development of the total potential oil and gas resources in the planning area. The NEPA document prepared for the subsequent area-wide offerings in a planning area will update the EIS that was prepared for the first offering with information that has become available since the first document was written. NEPA documents for sales in the same planning area will be determined and prepared on a case-by-case basis following scoping activities related to later offerings.

The draft EIS will be filed with EPA approximately 11 months after the Call for Information. It will be the result of information gathering and analysis which has taken place during the previous two-year period. From a comparable step in the current process, it takes 26 months to prepare a draft EIS. There is no shortening of the environmental assessment process as required by NEPA and other environmental legislation under the streamlined process. No opportunities for public participation in the environmental assessment process which exist under the present system will be eliminated. EIS analysis will be based on probable resources which may be leased as a result of the sale in question and the impacts associated with development of those resources. The EIS will also consider the impacts of the development of all the oil and gas resources in the planning area and, where appropriate, other relevant activities such as major sewage outfalls, offshore ports, etc. It will, as in the past, employ modeling techniques where necessary to aid in the analysis of probable impacts. The assessment, including modeling efforts, will treat groups of tracts or areas rather than individual tracts. This approach is reasonable given that most resources likely to be impacted are not confined to specific tracts, e.g., endangered species and fish spawning areas.

The EIS will analyze alternatives developed through the scoping process. Alternatives may also be developed proposing the deletion of specific tracts or groups of tracts to protect environmental resources or avoid use conflicts or for other major reasons.

Question: What is the basis for Secretary Watt's statement that "in each area the value of development, minus production and transportation costs, is at least 20 times greater than the measurable environmental costs"? What are those measurable costs, and how were they measured? How was the "value of development" determined in each area?

Answer: Appendix 2 of the SID for the tentative proposed final 5-year leasing program gives considerable detail on how the value of development was estimated for each area. Essentially, the net economic value of an area is the difference between the production revenues and the costs of finding, producing, and transporting the resources to market. The estimating methodology is quite straightforward, and the treatment in the SID gives all relevant assumptions as to prices and costs. The major unknowns, of course, are the levels of resources for all frontier areas where there has been little or no drilling.

The estimates of measurable environmental costs involve much more difficult problems. No widely agreed upon methodology has been developed to date to measure economic values of things which never enter the market place. Potential ecological damages account for the largest portion of external costs and are also the most difficult to measure. Even those costs most amenable to measurement, e.g., the costs of clean-up after an oil spill, are based on the level of resources and, therefore, are highly subjective for frontier areas where little exploration has taken place. Appendix 8 of the SID treats the calculations and the problems associated with attempts to quantify external costs. An approach was used to assign costs on the high side in subjective assessments so that the probable effect was to overstate costs. The SID analyses were also couched in qualitative terms as well and properly so, because of the great difficulty in measuring costs and benefits.

Question: Your ability to generate enough information from the kind of large-area environmental assessments planned has also been questioned. Some have said the proposed process will result in more likelihood of missing environmentally sensitive areas that should be deleted. The Chairman of the OCS Scientific Advisory Committee has questioned whether environmental information can be generated fast enough or evaluated quickly enough to determine whether the leases should be offered. What is your response to these concerns?

Answer: The OCS Environmental Studies Program has initiated studies in all planning units on the current leasing schedule. Reconnaissance studies of these areas are designed to locate sensitive areas which may require further study or special consideration. These efforts are most intense in the frontier areas of Alaska, specifically in the Bering Sea and the Arctic Ocean. Once they have been located, these habitats can be studied more thoroughly to evaluate their sensitivity to oil and gas operations. The identification of these habitats may occur as early as four or five years before a scheduled lease sale. This provides sufficient time for a more thorough evaluation of sensitive processes or species.

In addition to its own studies, BLM relies upon studies by other parties to evaluate sensitive areas. This information is used in the design and scheduling of studies for planning areas.

Question: You, Mr. Burford, were quoted last summer as saying the plan "won't necessarily mean more drilling but will give the companies a chance to use their proprietary knowledge to drill where they think they have the best chance of success." How will you ensure such indications of industry interest do not override areas with significant potential environmental risks?

Answer: As in the past, comments and recommendations as to which areas should or should not be offered for leasing will be solicited by the Department. This input would occur during the scoping process for the environmental impact statement, through the Call for Information, public hearings, Governor's comments on the proposed sale notice, etc. This provides the opportunity for the Secretary of the Interior to balance the national interest and the well-being of citizens of an affected state.

Question: The GAO report of December 18, 1981 questioned the level of staffing and funding estimated as necessary by the Department to carry out this expanded 5-year program, compared with the June 1980 program. What are your total current estimates for staffing and funding for the 5-year program? What were the comparable figures for the June 1980 version? If the new estimates are lower, justify how you will accomplish the expanded program at the lower levels.

Answer: The Bureau's estimates for the May 1982 proposed final five-year program are higher than the June 1980 estimates for the comparable years.

	June 1980 Program*		May 1982 Program	
	($ Million)	(FTE)	($ Million)	(FTE)
FY1982	43.3	279	39.7**	288
FY1983	33.7	285	43.8	343
FY1984	32.0	285	46.4	347
FY1985	28.8	286	34.0	331
	136.8		163.9	

*Figures have been adjusted to reflect an administrative change in handling General Administration funds within the Bureau budget appropriation.

**Actual appropriation

A more detailed comparison of the estimates for the two leasing schedules is not practical. The estimated dollars and personnel reflect resources needed to support only those sales on the schedules, as opposed to what it costs to run the OCS Program on a yearly basis. For example, the figures shown above for FY 1984 and FY 1985 under the June 1980 Program do not include the costs to begin the initial phases of sales to be conducted in late FY 1985, FY 1986 and 1987. The figures shown for the May 1982 Program include costs for all sales in FY 1984 (sales on the schedules as well as outyear sales). However, the figures for FY 1985 do not include costs of support for sales beyond June 1987.

Question: Problems have been cited with Interior's current method for determining fair market value. What is the status of the call for recommendations on procedures to be used in evaluating bidding? Have proposals been developed? If not, what is the timeframe for doing so?

Answer: An SID on fair market value was prepared on March 12, 1982, as part of the 5-year program. A decision on how the Department will ensure receipt of fair market value was made based on the analysis of alternatives in the SID and on recommendations from policy officials. This decision was explained in the Congressional submission of the tentative proposed final 5-year program. Modifications to the fair market value procedures were explained in the Congressional submission of the proposed final 5-year program.

Question: The GAO report also recommended the Department submit in its final program submission to Congress detailed information and analysis as to practices and procedures by which the streamlining concepts are to be implemented, with the focus on such key areas as environmental impact statement preparation and fair market value determinations. Are you prepared to submit such detailed analyses? If not, do you plan to do so, and when? Can you describe at this time what the streamlined OCS process, including shortening the pre-sale process, will involve? What will you not do that you have done in the past?

Answer: This information was included in the Forest Service EIS and the submission to Congress of the tentative proposed final 5-Year Program. There are two basic types of changes in the proposed streamlined leasing process. The first type is the telescoping of procedural steps. An example of this is the issuance of the Final EIS and Proposed Notice of Sale in the same month. The second type involves changes in the planning activities themselves. An example is studying for lease those portions of a planning area which MMS and the oil and gas industry believe have the potential for discovery of commercial deposits of oil and gas rather than studying a small number of specific tracts which most energy firms agree are prospective for oil and gas.

In general, streamlining will:

1. Replace pre-sale tract evaluation with post-sale fair market value review;

2. Reduce the time between the call and the final EIS, but not reduce the total time spent on preparing an EIS;

3. Reduce the time between the leasing steps;

4. Publish the proposed Notice of Sale simultaneously with the Final EIS;

5. Pursuant to the repeal of DOE review in P.L. 97-100, the regulatory requirement for such review will be removed.

Attached is a copy of an excerpt from the 5-year schedule transmittal letter to Congress, dated March 13, 1982, which outlines streamlining in general (Attachment 2).

OFFSHORE LEASING

Question: You indicate the post-lease evaluation process which now takes about two weeks will take up to 90 days in some cases under the proposed approach. Please explain the reason for the increase in time involved.

Answer: We are switching from a pre- to post-sale evaluation for assuring receipt of fair market value. Under this new system, we will accept bids in a sequential process. Some bids will be accepted immediately; others will be accepted after a brief screening process; and some will not be accepted until after a detailed evaluation. Generating the information needed and conducting the detailed evaluation may take up to 90 days. Previously this information would have been generated before the sale for all tracts offered. We believe the disadvantage of increased time needed to complete our evaluation of the few tracts requiring a complete Monte Carlo evaluation is more than offset by the advantages of not gathering detailed information on tracts which may receive no bids and relying more on competition to assure receipt of fair market value.

Question: What is the basis for your estimate that leases issued per sale will increase under the new "streamlined" process, to a total of 1800 in 1983, compared to 880 planned under the previous program?

Answer: Estimates of leases issued per sale are based on the total planning areas to be offered for lease. In arriving at the estimates, six basic assumptions were used:

1. Industry interest, geologically favorable acreage, sale specific summary reports, and total resource levels

2. Comparison of sale areas on a relative basis according to USGS estimates in the DSEIS

3. Assumed a higher minimum bid

4. Assumed that companies may spread existing capital over a greater amount of acreage to reduce the economic risks, based on a lack of information for the large planning units

5. Historical trends in a particular sale area

6. Acreage based on most recent planning unit boundary changes.

The estimated number of leases (1,800) under the July 1981 proposed schedule was developed based on the range of estimated acreage to be offered and leased in FY 1983. These estimates have been revised based on the May 1982 proposed final schedule to reflect 1,900 leases. Estimates were derived by using the same assumptions.

Question: Will lessees still be required to submit post sale reports and planning documents that were required under USGS regulations?

Answer: Yes, lessees will still be required to submit the same post-sale reports and planning documents that were required by USGS.

Question: You intend to automate the present manual system of records maintenance and data storage. Provide a breakdown of the $200,000 for the record.

Answer: The $200,000 estimated cost for records maintenance and data storage is actually mislabeled. A more appropriate heading would be OCS Data Management. That figure includes $100,000 to establish an automated system for recording lease-status information and $30,000 for acquiring data for that system. In addition an estimated $40,000 will be required to complete the design and implement the post-sale analysis system which is currently being revised. The program also has estimated only $30,000 to begin automating our manual recordkeeping system which would allow necessary data analysis and increase accessibility to the information.

Question: What are the specific activities previously handled by other offices of the Department which BLM will take over in 1983 and by which offices? What are the costs associated with those activities? Are positions being shifted from those offices to carry out this work?

Answer: Pre-sale selection of bidding system parameters and post-sale analysis of bidding system experiments required under the OCS Lands Act Amendments were transferred from the

Department's Policy, Budget and Administration Office to the Bureau of Land Management beginning in FY 1982.

No positions were shifted to BLM to carry out this work. Approximately $285,000 will be devoted toward accomplishing these activities. This includes funding two full-time positions ($70,000), conducting a bidding system study ($100,000), revising the bidding system model ($40,000), and conducting a study on the fair market value system ($75,000).

Question: How many positions are assigned to the Environmental Studies activity? How does this compare to 1981 and 1982? Are all the positions currently filled?

Answer: Approximately 57 positions were requested for the Environmental Studies Program in FY 1983. These positions are located in the Washington Office and the four OCS offices. Presently, there are 6 vacancies and a total of 52 positions. An increase of five positions has been requested in FY 1983. There was an increase of three positions between 1980 and 1982.

Question: Describe the criteria you use to determine the priority of environmental studies on the National Study List. Is a new list prepared each year?

Answer: The criteria used to determine regional and national study priorities are described in Instruction Memorandum 79-730 (Attachment 3) These criteria are used annually to evaluate the importance of information needs for the OCS leasing program. A new National Study List is prepared every year. The ranking criteria and directions for their use are provided in Attachment 3.

Question: How many studies in total will be carried out in 1983 at the requested level? How does this compare to 1981 and 1982?

Answer: BLM's current estimate of studies to be performed in 1983 is 83. Of these studies 58 will be managed directly by BLM, and 25 will be managed through NOAA/OCSEAP. In 1981 the studies program supported 102 studies of which BLM directly managed 35, and NOAA/OCSEAP managed 67. In 1982 BLM is supporting 101 studies and directly managed 53 of these. The remaining 48 were managed through NOAA/OCSEAP. The projected decrease in the number of studies managed by NOAA/OCSEAP in 1983 is based on preliminary proposals by that agency and does not represent a significant reduction in BLM's financial support.

Question: Provide for the record a breakdown of the $1.5 million in "other services."

Answer: The $1.5 million identified as "other services" is composed of the following program costs:

(1) Proposed increase of $1,211,000 for the Environmental Studies Program, specifically to fund the following studies identified on the FY 1983 National Study List:

Study/Requirement	Amount
Monitoring of Seabirds and Shorebirds in the Arctic	+$300,000
Survey of Regional Socioeconomic Models	+$ 25,000
Effects of OCS Activities on Endangered Species in the Gulf of Mexico	+$500,000
Marine Mammal Migration through the Bering Straits	+$386,000

(2) Development of an automated data management system in FY 1983 is estimated at $200,000.

(3) Bidding System Model Revisions to reflect changes in tax laws and to accommodate new bidding systems (approximately $30,000).

(4) Study on the effects of the Fair Market Value system on bidding and competition (approximately $60,000).

LANDS AND REALTY MANAGEMENT

Question: You are requesting $7.3 million for energy-related realty, an increase of $1.7 million. You were required under 43 USC 1722 to process by last October all applications for unintentional trespass filed under the Act of September 26, 1968, and sale of those lands as appropriate. Did you meet the deadline? What was involved?

Answer: Section 214 of the Federal Land Policy and Management Act provided that all pending applications were to be processed within five years of the date of enactment. The Bureau processed all 470 applications, involving 19,011 acres of land by the deadline of October 21, 1981.

Question: Last year, you decreased this program on the basis of a shift in workload to nonenergy realty. This year, you state the reduction reflects savings from reducing the cost to process a case from $2,350 in FY 1981 to $1,640 in FY 1982. Did the shift in workload not occur as you had anticipated? Were the positions shifted to nonenergy realty? How have the cost savings been achieved?

Answer: In 1981, we attempted to adjust the workload between energy and nonenergy realty on the basis of the number of cases processed in previous years. Before FY 1981 ended, we discovered that our estimate of the number of new energy realty cases was low. The workload is increasing rather than dropping or remaining constant. The positions were shifted to nonenergy realty.

The cost savings are due to a simplified right-of-way granting document and national stipulations, a revised right-of-way manual, regulatory reform, a simplified right-of-way application form, and the liberalized use of NEPA categorical exclusions.

Question: Your request for nonenergy-related realty is $12.7 million, an increase of $1.7 million. What is the impact of the reduction in compliance checks from 2,322 in 1981 to 1,624 in 1982? What effect will it have on unauthorized use situations?

Answer: With the delegation of authority to the district and resource areas, it is anticipated that increased preapplication discussion will take place between the BLM and prospective applicants, resulting in a better understanding of the requirements and limitations. The effect should be that once a grant (lease, license, permit, etc.) is issued, BLM can spend less time assuring that the grantee is in compliance with the terms and conditions. Attention will be given to those activities which are potentially impacted, or which BLM has some reason to be concerned that the terms of the grant may not be complied with.

Question: Are you completing the 12 million acre inventory of such unauthorized uses in 1982, as indicated last year?

Answer: We will complete 12 million acres of unauthorized use inventory in FY 1982. An inventory of unauthorized uses is conducted during the data gathering phase of the land use planning process to the extent that manpower and funding will permit. The level of inventory is usually adequate to identify unauthorized structures and agricultural development.

Question: What impact will your 1983 request allow you to have in the unauthorized use situation? Is this sufficient?

Answer: Funding at the proposed level is sufficient and will allow gradual reduction of the case backlog. Attention is being given to the prevention of new cases of unauthorized uses from becoming established, thereby curtailing the growth of the backlog. Unauthorized uses will be considered in light of the Asset Management Program and may be resolved through public land sale.

Question: How does your budget request for activities related to unauthorized use compare to the amounts requested by your State offices? Does your budget reflect the priorities for this activity expressed at the local level?

Answer: The 400 cases which are proposed to be processed are based on the State's submissions and reflect the priorities at the local level.

Our directives to the field did not provide targets; therefore, each State had latitude in recommending fund allocation between components of the non-energy realty program. The FTE's, funds and output proposed for dealing with unauthorized uses of the public land are basically a composite of the State submissions and, as such, reflect their priorities.

WITHDRAWAL REVIEW

Question: Your request for withdrawal review and processing is $3.7 million, a decrease of $0.4 million. What are the streamlined procedures resulting in 30% cost savings for withdrawal and classification reviews?

Answer: A number of steps have been taken to streamline procedures in the review of withdrawals and classifications including:

- combining land reports, mineral reports, and environmental assessments (if needed) into one document, substantially reducing duplication;
- eliminating the need for reports from the Geological Survey regarding leasable minerals and reducing report requirements for locatable minerals prepared by BLM minerals specialists; and
- eliminating the need for environmental assessments on about 90 percent of the withdrawal reviews, revocations, and classification cancellations in accordance with new guidelines for categorical exclusions.

These changes have been conveyed to BLM field offices and were fully implemented at the start of FY 1982. The streamlined procedures entail:

1. Field review of the withdrawal;
2. Review of pertinent documents, e.g., land use plans, current mineral data, etc.;
3. Preparation of a land report including resource values, environmental analyses, mineral assessments, recommendations on withdrawal as to retention or revocation, etc.;
4. Preliminary decision by the field land managers;
5. Preparation of a recommendation memorandum and public land order; and
6. Submission for final approval.

Question: What are the guidelines or regulations under which you will be tightening control over the granting of new withdrawals?

Answer: New withdrawals will be governed by the regulations in 43 CFR 2300.

Question: What is the total number of BLM withdrawals for which you intend to have completed the review by 1983?

Answer: The Bureau plans to complete review of all BLM withdrawals (1,300) by the start of FY 1983.

Question: How much of the 1983 budget is intended for Alaska?

Answer: The 1983 budget contains $300,000 for Alaska.

FOREST MANAGEMENT

Question: Your request for forest management is $6.0 million, a decrease of $2.2 million. What were actual harvest levels in 1981? How does this compare to 1979 and 1980?

Answer: We do not track timber harvest levels on Public Domain lands since we receive a lump sum payment for the estimated volume of timber offered in each sale before the timber is cut. The sale level for the Public Domain in 1981 was 101.7 million board feet (mmbf). The harvest level was 65 mmbf in 1979 and 89.9 mmbf in 1980.

Question: What is the current backlog of unharvested timber? How does this compare to previous years?

Answer: The current backlog of unharvested timber on the Public Domain is 147.7 mmbf which is about 15 percent greater than in previous years.

Question: How much is included in your request for harvest activities? What level of timber harvest for 1983 does this assume?

Answer: The Public Domain forestry budget for FY 1983 includes $2.3 million for forest management activities relating to timber harvesting. We plan to offer 97 mmbf in FY 1983.

Question: You are reducing the level of inventory and planning since "most of this workload has already been accomplished." What impact will these reductions have on the EIS/EA schedule?

Answer: The reductions will have no impact on the EIS/EA schedule.

Question: How many acres have been inventoried, and how many remain? What is your estimate for when the inventory will be completed?

Answer: The extensive inventory for the Public Domain is complete. A Timber Production Capability Classification (TPCC) inventory has been completed on 1,063,829 acres; and 666,965 acres remain to be done. An operations inventory has been completed on 248,000 acres; and 1,482,794 acres remain to be done.

The TPCC inventory should be completed by the end of Fiscal Year 1985. The operations inventory should be completed by the end of FY 1990.

Question: How can you maintain sustained yield if you maintain sales levels but reduce pest control from 50,000 to 12,000 acres; reduce site and stand improvement from 7,000 to 6,500 acres; and reduce seedlings planted from 1,400,000 to 864,000?

Answer: Sustained yield levels can be maintained with a reduction in pest control, site and stand improvement, and planting because a one-or two-year reduction in these activities will have no significant impact on maintaining sustained yield over the long run.

Question: You are undertaking a program review related to the fact that in some areas, the cost of management is greater than revenues generated from timber sales. What exactly is the purpose of this review? How will you carry it out? When do you intend to complete it?

Answer: The purpose of the program review is to find ways of improving the effectiveness and efficiency of the program. This will be done by evaluating the various processes involved in carrying out the forest management program. We intend to have the review completed and an overall forest management policy in place by July 1983.

Question: Do you anticipate any further extensions to the "grace period" for preventing defaults beyond June 30? What impact has the grace period had on harvest levels to date in FY 1982? How many contracts came due since the grace period was initiated? How many were not exercised?

Answer: We hope to have a solution to the contract default problem by June 30, 1982. The grace period has been in effect since October 1, 1981. The following table compares monthly harvest levels in FY 1981 to FY 1982.

	Volume Harvested - O&C (Board Feet)	
Month	1981	1982
October	87,475,600	41,696,000
November	63,059,100	45,419,800

Month	1981	1982
December	59,716,200	27,088,900
January	67,027,200	13,407,400
February	79,731,300	15,072,800
March	66,723,500	23,647,000

Between October 1, 1981, and March 31, 1982, 88 contracts were due to expire. Of these, 38 still have not been completed.

WILD HORSE AND BURRO PROGRAM

Question: Your request for range management is $36.6 million, a decrease of $4.9 million. $1.1 million of the decrease is for the Wild Horse and Burro program. Recently, legislation was introduced which would give BLM "sale authority" as a means of disposing of excess animals. What is BLM's position on the legislation? What would the sale authority involve? Would there be any prohibitions as to whom the animals could be sold and for what purpose? If so, how would you monitor such activities?

Answer: The Department of the Interior is presently reviewing H.R. 5825 to determine its position on the proposed legislation. The "sale authority" in H.R. 5825 would appear to allow BLM to sell excess animals for which an adoption demand by qualified individuals does not exist. The proposed legislation does not appear to contain any prohibitions as to whom the animals may be sold or for what purpose. Details would presumably be established through regulation development with public involvement. If the wild horse and burro advisory board were reestablished, the board could have a role in assisting BLM in the development of appropriate sale procedures.

Question: What are the prospects for the legislation?

Answer: BLM does not know at this time what the prospects for passage of the legislation would be.

Question: What is your current estimate of the number of wild horses and burros on the range? What number do you propose to reach eventually for management purposes? When?

Answer: We estimate there are presently about 56,800 wild horses and burros on the public lands administered by BLM. The number of animals that can be maintained on a specific area is determined by the amount of food, water, cover, and space available for their use. The proper balance of wild horses and burros, wildlife, and livestock is determined through BLM's multiple-use planning system, which includes opportunities for meaningful public participation. Although planning is incomplete in many areas, BLM estimates approximately 25,000 wild horses and burros will remain on the public rangelands. Planning is scheduled for completion by

1989, and management levels should be reached shortly thereafter for those remaining areas.

Question: The $1.1 million decrease will terminate all BLM-supported research. What were the results of the National Academy of Science overview? How many studies did NAS recommend? How many were undertaken?

Answer: The National Academy of Science submitted a report to the Secretaries of the Interior and Agriculture in November 1980 which assessed the current state of knowledge of wild horses and burros and set forth the kind of research effort "that could provide information now lacking but essential to sound management of wild and free-roaming horses and burros." The NAS recommended 18 research studies. BLM has provided funding for 5 of these through Fiscal Year 1982. In addition, BLM conducted three separate research studies which were initiated before the NAS study began.

Question: Will the required report be completed by next January? Will enough research have been completed on which to base the report?

Answer: The final NAS report, due in October 1982, will be based on the completed studies, and we have been given verbal assurance that the report will be completed in time to submit to Congress by January 1983. We believe the five studies to be completed will provide important information concerning the management of wild horses and burros and provide a sound basis for the report to Congress.

GRAZING MANAGEMENT

Question: Your request for grazing management is $32.3 million, a decrease of $3.8 million and 60 FTE's. You had originally planned to complete 17 EIS's in 1981, but only completed 13. What was the reason for the decrease?

Answer: A material deviation to the agreement with Natural Resources Defense Council, et al., was requested and obtained from the court on four grazing EIS's scheduled for completion in 1981. Three of these EIS's were delayed due to problems with processing the vegetation inventory information through our automatic data processing equipment.

The other EIS was delayed due to alleged contractor fraud involving the collection of vegetation inventory data.

Question: How many EIS's have been completed to date, in total? What has been the cost associated with these EIS's?

Answer: There have been 50 grazing EIS's completed to date. The cost associated with the EIS's is shown on the following table:

Years	No. of EIS's	Total Cost	Average/EIS
1978	9	$3,516,000	$319,000
1979	13	3,839,000	295,000
1980	15	3,299,000	220,000
1981	13	1,903,000	146,000

These are preparation costs only. The inventory and planning costs were not included because these are not solely functions related to grazing EIS's.

Question: Have you changed the procedures for preparing the EIS's? If so, describe the changes.

Answer: The basic procedures for preparing grazing EIS's have not been changed. Grazing EIS's are still prepared in accordance with the requirements of 40 CFR 1500 - 1508. However, the proposals for grazing management that are analyzed in our EIS's have changed. The Grazing Management Policy places more emphasis on inventory and monitoring to solve specific problems rather than a general vegetation inventory and vegetation allocation that characterized grazing proposals in past EIS's.

Question: What is the status of the joint study with the Forest Service under PRIA regarding establishing a new fee formula? Will you be able to complete the study and report by January 1985 as originally planned, or are you planning changes in the study in order to meet the deadline?

Answer: Studies pertaining to the report to Congress by the Secretaries of the Interior and Agriculture, on their evaluation of the PRIA grazing fee formula, other grazing fee options and their recommendation on a fee schedule for 1986 and subsequent years are underway. They include:

A. Northern Great Plains Grazing Fee Study - The Statistical Reporting Service (SRS) of the USDA is conducting a survey of private grazing land lease rates (PGLLR's) charged in a 51-county area of North and South Dakota, Montana, Wyoming, and Nebraska. The PGLLR's are included in index form in the grazing fee. Instead of using the sampling technique for determining PGLLR's, the SRS completely surveyed 12,000 livestock operations. Analysis of the data will determine if the PGLLR's obtained annually through the sampling technique are valid.

This study was initiated because the livestock industry is concerned that inclusion of private lands in the eastern parts of the Great Plains States is resulting in a too high PGLLR. Preliminary analysis of the data does not support the industry's concern. BLM is funding $80,000 of the $280,000 cost of the study.

B. Comparative Study of Western States, Local, and Other Federal Government Grazing Fee Systems and User Charges - The study will identify and describe all grazing fee systems on State and other Federal grazing lands in the 16 Western States. An analysis of these systems including tenure, responsibilities of the lessor and lessee, range improvement investments, fee determination, and distribution of receipts will be made. In addition, the different fee systems will be evaluated against the goals of fair return, stability of the livestock industry, and equity among livestock operators. A report will be made on the advantages and disadvantages of the various systems. A contract was issued in February 1982 with a completion date of August 1983. The $100,000 cost of the contract will be financed equally by BLM and the Forest Service.

C. Congress required that the Secretaries secure data on "the value of Federal grazing lands as compared to privately-owned lands." - Ways investigated to meet this charge were:

(1) A survey of western ranchers to determine the value of grazing on private lands and the price adjustments necessary to convert these values to a value for public land grazing.

(2) An appraisal to determine lease value of public grazing lands. An in-house test of this methodology has been completed.

The BLM decided to use the appraisal approach to determine "the value of Federal grazing lands as compared with privately owned lands."

The Bureau and the Forest Service are following a schedule that should accelerate the completion of the report. We expect that a draft report will be available on or before June of 1984 and that the final report will be completed in December of 1984. This will allow Congress one year to act on the Secretaries' recommendation before the PRIA fee formula expires in February of 1986.

GRAZING REGULATIONS

Question: You proposed changes to the grazing regulations. Have the changes gone into effect yet? If not, what is the timeframe for finalizing them? Summarize the changes as proposed or finalized. How will you streamline Bureau procedures for handling unauthorized grazing use?

Answer: The proposed changes to the Grazing Administration Regulations, 43 CFR Subpart 4100, have not been published. The target date for publishing is June 30, 1982. All procedural guidance is proposed for removal from the regulations and will be included in the Bureau Manual. A summary of major changes follows:

§4100.0-2 OBJECTIVES

Proposed rulemaking: This section was proposed for revision to incorporate reference to land-use plans required by the Federal Land Policy and Management Act (FLPMA).

Proposed final rulemaking: This section will incorporate language from the Taylor Grazing Act and the Public Rangelands Improvement Act (PRIA). Several comments were received on deleting reference to "protecting the lands from destruction." Since the Taylor Grazing Act as well as FLPMA and PRIA refer to this aspect, rather than deleting the phrase, we are proposing to incorporate a quote from the Taylor Grazing Act. A reference from PRIA was included as the basis for our new Grazing Management Policy.

§4100.0-5 DEFINITIONS

Proposed rulemaking: The proposal included modifying three existing definitions and adding two.

Proposed final rulemaking: This section will modify the definition of an "allotment management plan" by deleting reference to the procedural guidance.

§4110.3 CHANGES IN AVAILABLE FORAGE

Proposed rulemaking: The section on decreases in forage (4110.3-2(b)) deleted reference to land-use plans and substituted the phrase multiple-use management objectives. A change was also made in paragraph (c) for scheduling suspensions over a 5-year period. Rather than implementing all reductions by a decision, a provision was made to implement reductions by "mutual agreements."

Proposed final rulemaking: A major change is proposed for mutual agreements. This section still stresses implementing reductions in grazing use by mutual agreements but now states that these agreements will be documented by a decision. This change was made to provide permanency to the agreement and allow for protests and appeals from other affected interests.

§4110.4-2 DECREASE IN LAND ACREAGE

Proposed rulemaking: This section was modified to reflect FLPMA, by adding that two years notification must be given to cancel a permit in whole, "or in part," when public lands are disposed of or devoted to a public purpose which precludes livestock grazing.

Proposed final rulemaking: No change was proposed for this section, even though the majority of BLM comments on this section recommended dropping the phrase "or in part." The section remains unchanged due to the Solicitor's Opinion on the intent of FLPMA.

§4150.3 SETTLEMENT (Unauthorized Use)

Proposed rulemaking: The proposal included doubling the fee for nonwillful violations and including any expenses incurred by BLM for gathering, impounding, caring for, and disposing of livestock. Three times the fee was proposed for willful violations.

Proposed final rulemaking: Numerous comments were received on this section. The livestock industry did not support double the rate for nonwillful violations since this was more than the value of the forage consumed. They also did not favor three times the rate for willful violations since this would constitute "double jeopardy" (since we can take action against their permit under 4170). A few comments were received supporting the proposal.

The proposed final rulemaking incorporates a new approach. First time nonwillful violations would be treated as they are under the current regulations (i.e., they would be billed only for the value of the forage). However, repeated nonwillful violations would be assessed at two times the fee, plus the authorized officer may take action on the permit under §4170.1-1(a). Willful violations would be fined at three times the fee, and repeated willful violations would have action taken on the permit under §4170.1-1(b).

This approach recognizes that first time nonwillful violations should only be billed for the value of the forage consumed. However, repeated violations or willful violations would carry additional fees and possible action under §4170 as a deterrent to unauthorized use.

The main effort toward streamlining the unauthorized use procedures involves combining the "Demand for Payment" procedure with the Proposed Decision.

- OTHER ISSUES:

Land-Use Plans - The objectives were reworded to incorporate reference to land-use plans, and all other references were deleted and substituted with the phrase "multiple-use objectives." Numerous comments were received on this change, and it was viewed as an abdication of our responsibility to land-use plans as specified by FLPMA.

Our intent was to strengthen our commitment to land-use plans by making them part of the objectives.

GRAZING TRESPASS

Question: A recent GAO report (March 10, 1982) discusses shortcomings in BLM's handling of grazing trespass or overgrazing found at specific locations. Why should ranchers be able to negotiate even lesser fines than the already low rates levied against them?

Answer: The method used in the GAO report for determining the fee charged for unauthorized grazing is not the same method used by BLM. According to the report, the fee for unauthorized use (trespass) is twice the rate of authorized use. At the time of the study, the fee for authorized use was $2.31 per animal unit month (AUM), so GAO apparently concluded that the trespass fee would be $4.62 per AUM. The GAO report then compares this trespass fee with the cost of leasing commercial pasture (the report says about $10 per AUM, but actually it was $7.88 at the time of the study and is presently $8.83). GAO concludes that it appears to be economically advantageous to trespass because the fee for trespass is less than the fee to lease private pasture. However, the trespass fee is, in fact, not based on the grazing fee for authorized use.

The fee charged for unauthorized grazing use is based on the private land lease rate established by the SRS of the USDA in their June Livestock Enumerative Survey. For the period from September 1, 1981 to August 31, 1982, the fee for nonwillful unauthorized grazing use is $8.83 per animal unit month (AUM). For willful or repeated willful acts, the fee is twice the private land lease rate, or $17.66 per AUM. The trespass fee is considered a civil assessment for value of the forage consumed, rather than a fine. For serious and repeated willful unauthorized grazing use, the authorized officer may take action to suspend or revoke the livestock operator's permit or lease. In addition, criminal charges may be taken before a U.S. Magistrate, who may levy a fine of no more than $1,000 or imprisonment of no more than 12 months or both, under the Federal Land Policy and Management Act.

When the BLM authorized officer (District Manager or Area Manager) issues a Notice of Unauthorized Use and alleges a trespass has occurred, the livestock owner may make an offer of settlement which is lower than the amount the Bureau calculated was due. When considering whether to accept the offer, the authorized officer must consider the adequacy of the evidence, the seriousness or flagrancy of the violation, the operator's evidence which contradicts BLM's evidence, and the cost of pursuing the case through a hearing and court case. The authorized officer may decide to accept the offer if it is reasonably close to the amount BLM had calculated, or if the rancher can demonstrate that the Bureau's figures were incorrect.

As an additional deterrent to unauthorized grazing use, BLM is proposing a graduated trespass fee, ranging from one to three times the PGLLR, depending on whether the incident was accidental (gate left open by hunters, etc.), repeated or willful, with action to suspend or revoke the permit/lease possible for repeated willful trespass. Criminal sanctions would remain for flagrant and repeated willful offenders.

Question: The report indicated impounding livestock, with the threat of selling the animals, is the best method of correcting trespass. How often do you use this method? Could it be used more?

Answer: Impoundment of livestock normally is used only as a last resort, when all other efforts to correct the trespass have failed. Impoundment amounts to confiscation of private property; therefore, we must follow a precise and complicated legal process, which is both time-consuming and expensive. Most BLM Districts do not have a crew readily available with the horses, equipment, and skills necessary to roundup livestock under range conditions. Consequently, it is sometimes necessary to contract with a local rancher to conduct the roundup, and ranchers are often reluctant to participate in impounding their neighbor's livestock. When this method is used, it is quite effective. Impoundment is now used on a small percentage of the known unauthorized use cases. The use of impoundment has been increasing in recent years. What the GAO report does point out is that under the laws and regulations within which we must operate, it takes a long history of repeated and willful trespass acts before the Bureau can do much more than charge the rancher the same amount he would have to pay for private forage.

The proposed graduated fee up to three times the private rate is intended as a deterrent to unauthorized use.

ALLOCATION OF INCREASED GRAZING USE

Question: The proposed (or final) regulations would also "allow BLM field personnel to allocate increased grazing use of lessees whose contributions result in increased forage production permanently available for livestock use." How will you determine when such conditions have been met? Will this regulation require increased follow-on monitoring? If so, will you have adequate personnel (with the reduction of 60 FTE's) to accomplish this?

Answer: The proposed changes to the Grazing Administration Regulations set a priority for allocating additional forage permanently available for livestock use over and above the preferences of the permittees or lessees. This priority is as follows:

1. Permittees or lessees in proportion to their contribution or efforts which resulted in increased forage production; or

2. Permittees or lessees in proportion to their preference; or

3. Other qualified applicants.

The primary method for identifying when an increase in forage is appropriate will be through the Bureau's monitoring efforts. The determination can be made under our normal monitoring program and would not require an increased effort. To a lesser extent inventories may also be utilized for making this determination.

The reduction of 60 FTE's should not affect the Bureau's efforts in the monitoring program. Since monitoring is a high priority, a shift in program funds has been proposed for this effort for Fiscal Year 1983.

RANGELAND CONDITIONS

Question: You will implement 100 less Allotment Management Plans (AMP's) in 1983 than 1982. How would you characterize BLM rangeland conditions at present? Are they improved over prior years? If not, what is the rationale for the shift to multi-year monitoring of range conditions before deciding if livestock adjustments are needed?

Answer: The 1975 "Range Condition Report" prepared for the Senate Committee on Appropriations identified about 78 percent of the rangelands were in fair or poor condition. This is still the latest available Bureauwide range condition information.

A 1980 analysis of the first 22 grazing EIS's showed that 69 percent of the public lands covered by these statements were in fair or poor condition. This information mainly reflects ecological condition, rather than livestock forage condition, which was the basis of the 1975 Senate Report.

Grazing management programs proposed in the earliest grazing EIS's (1978-1980) were just being implemented in 1980 and 1981, and the results would only now be starting to become apparent. In those areas where the EIS has been completed and the grazing programs implemented, we would expect that conditions are improving. Bureauwide figures are not yet available.

The shift to multi-year monitoring partially resulted from continued opposition to livestock adjustments based on "one-time" inventories. The new grazing management policy (signed March 5, 1982) does not rely totally on monitoring but provides for the use of baseline inventories (soils and ecological site vegetation mapping) combined with monitoring data. In areas with serious problems or resource use conflicts, the policy still provides for collecting vegetation production data, to be used singularly or in combination with monitoring data to arrive at appropriate livestock stocking rates.

Question: Since AMP's are supposed to be the basis for making decisions on adjustments, what do you see as the long-term impact of postponing the completion date for AMP implementation by nine years?

Answer: AMP's are not necessarily the only basis for making decisions on adjustments. Our grazing EIS's are showing many allotments where a minor adjustment in season-of-use or livestock numbers may be all that is needed, and no AMP's are proposed for these allotments. For those allotments where AMP's are needed and proposed, postponing implementation of those AMP's may require larger adjustments in livestock use, or conditions may continue to decline or remain static until the AMP can be implemented. Improvement in range conditions may be slower under the extended implementation schedule.

RANGE IMPROVEMENTS

Question: There is a legal question of whether improvements to Federal property, which you are encouraging through private investment, constitute a right to that property. Do you believe that question has been adequately addressed?

Answer: Authorization to place improvements on the public lands by grazing permittees or grazing lessees is by way of cooperative agreements between the operator and BLM or by way of range improvement permits. The cooperative or permitted use routes are discretionary with the Secretary. Both the Taylor Grazing Act and the Federal Land Management Policy Act of 1976 are specific that the issuance of the grazing permits or grazing leases does not create any right, title, or interest in or to the public lands. (See 43 USC §§315b and 1752(h)).

If it became necessary for BLM to cancel a grazing permit or grazing lease in whole or in part in order to devote the lands so covered to another public purpose, including disposal, the permittee or lessee would receive from the Government reasonable compensation for the adjusted value of his interest in authorized permanent improvements. (43 USC §1752(g)). However, in the event of a transfer of a grazing permit or lease from one operator to another, the transferee is required to compensate the transferor for the reasonable value of improvements he has constructed (43 USC §§315c and 315m).

Section 3 of the Taylor Grazing Act (43 USC Sec. 315b) also states in part ". . . the issuance of a permit pursuant to the provisions of this Act shall not create any right, title, interest, or estate in or to the land." This portion of the Taylor Grazing Act has not been amended.

These provisions, however, have not prevented certain individuals from attempting to assert their "equity" in or to a particular allotment or area when the Bureau has proposed changes.

Question: The Rangeland Improvement Fund will be reduced by $2.2 million to $11.0 million in 1983, due to the decrease in grazing fees. In 1983, this fund will be used for on-the-ground development and project survey and design only; some personnel and other costs will be shifted to Grazing Management and other resource programs. What programs will pick up the cost of work performed in the past under the fund? List the programs, the activities, and related costs.

Answer: The programs that will pick up the cost of work not funded by the Rangeland Improvement Fund will be grazing; soil, water, air; and wildlife. The activities that will benefit from the improvements will support the environmental assessments, archaeological clearance, and the administrative costs, as follows:

Grazing Management	$1,300,000
Soil, Water, and Air Management	60,000
Wildlife Management	5,000

Question: You also state you will be phasing in a new policy over a 3-year period, under which the livestock operator will be responsible for "most" of the maintenance and future improvements. Last year, you stated "most" of the improvements were already maintained by the users. If that was true, why will it take 3 years to phase in a policy already in effect? How will you define "most" of the maintenance and improvements?

Answer: We estimate that approximately 75-80 percent of the light maintenance needs are done by the user. This includes splicing and tightening of wires on fences, lubricating pumps and servicing wells, and cleaning spring developments. Light maintenance is estimated to be no more than 30-40 percent of the total maintenance workload. BLM generally performs the heavier maintenance. On the remaining 60-70 percent of the maintenance requirements, a number are subject to cooperative agreements with the users for partial or total Bureau maintenance. These are legal agreements and will require renegotiation with the users in order to turn the maintenance over to them.

There are also many projects with no precisely established responsibility for maintenance that will be brought up to a serviceable standard by the Bureau before the maintenance is assumed by the user.

Question: What will be the basis for deciding when they are BLM's responsibility and when the users'? Will there be a penalty if a user refuses to provide required maintenance or improvements? If so, how will you enforce it?

Answer: We are requiring that those who benefit most from the improvement do the maintenance. For example, if the improvement is to benefit the range user, he will be required to do the maintenance; if it is primarily for wildlife values, then the wildlife interest would be asked to do the maintenance. As a rule of thumb, if an activity would benefit 50 percent or more, the maintenance will be funded by that activity.

Maintenance will be a condition of the grazing permit. If the permittee fails to do the maintenance, his user authorization will be withheld and the permit will be subject to cancellation.

Question: Last year, you proposed eliminating the McClure Amendment language in the Administrative Provisions, on the basis that the language "severely cripples efforts to reverse the decline in rangeland conditions." This year, you are proposing retention of the language. Has the decline in rangeland condition been reversed? If not, what has changed to make the language and its limitation on your ability to manage and improve the rangelands acceptable?

Answer: We have no data to indicate that the decline in rangeland condition has been reversed. The limitation the McClure Amendment places on our ability to manage and improve rangelands has become moot. Not a single decision of the type this language addresses has been issued in the past two years. Our Grazing Management Policy of March 5, 1982, provides that data from multi-year monitoring will provide the basis for adjusting livestock use levels in the majority of cases. This reduces the likelihood that decisions of the type the McClure Amendment addresses will be necessary as the affected stockman will be aware of the results of monitoring studies on a yearly basis.

SOIL, WATER, AND AIR MANAGEMENT

Question: Your request for soil, water, and air management is $14.8 million, a decrease of $2.3 million and 45 FTE's. You indicate soil inventories are "absolutely essential baseline data" for success of the new strategy in the range management program (i.e., multi-year monitoring); yet, soil inventories will be reduced 6 million acres in 1983. How will you be able to carry out your new strategy with less information available to you.

Answer: As stated, soil inventories are necessary baseline data, and for that reason we are proposing to conduct soil surveys where the baseline data is required for scheduled land-use planning. The 6 million acre reduction in inventory includes soil and water inventories. Soil inventory is reduced by approximately 2 million acres. The remaining acreage planned for inventory is consistent with the grazing EIS schedule and energy development leasing goals. At the proposed funding level, we will be able to acquire the essential data needed for these schedules.

Question: Provide for the record a breakdown of the soil, water, and air program for 1981, 1982 and 1983 by the 3 categories.

Answer: A breakdown of soil, water, and air funding is provided below:

Program Funding
Soil, Water, and Air Management
($000)

	FY 1981 Actual	FY 1982 Planned	FY 1983 Proposed
Soil	$10,899	$7,512	$6,289
Water	9,909	8,650	7,803
Air	745	770	680
Endangered Plants	520	---	---
Total	$22,073	$16,932	$14,772

WILDLIFE

Question: Your request for wildlife habitat management is $13.6 million, a decrease of $1.3 million and 30 FTE's. The decrease will result in 40 less habitat management plans being implemented, and 1,000,000 less acres of terrestrial habitat improved. No rationale is given for these decreases. Can you state what the rationale is?

Answer: The wildlife program's budget is based on two primary considerations: (1) the needs of other high priority Bureau programs; and (2) priorities within the wildlife program.

Our first priority is to provide data to support management objectives in other programs, e.g., oil and gas and other energy/minerals development, livestock grazing environmental impact statements, and forest management. Another high priority program is monitoring and studies. Information collected through monitoring and studies is needed to ensure existing programs and projects meet management objectives and to protect investments in existing HMP's. Support for monitoring also corresponds with our new rangeland management policy which emphasizes the need for monitoring. With these priorities in mind, reductions were proposed in the development of any new HMP's and a corresponding reduction in the implementation of both planned and new HMP's. Concurrent with these funding reductions in development, we reduced our personnel support requirements accordingly.

The best way to increase resource protection in line with pressures that result from development activities is to make sure that good wildlife inventory data are available to design the development project and then to monitor the effects of the project to ensure that management objectives have been met.

CULTURAL RESOURCES AND NATURAL HISTORY MANAGEMENT

Question: You are requesting $4.5 million for cultural resources and natural history management, the same level as the base. Your 1983 goals include reducing processing time on permit applications by decentralizing the process to State offices; and deleting involvement of the National Park Service, Smithsonian, or BLM Headquarters. What role did NPS and the Smithsonian play in granting permits? Will there be an impact from not using their expertise?

Answer: The NPS has traditionally been responsible for the overall coordination of application reviews and the issuance of permits to qualified applicants proposing work on the public lands. The Smithsonian Institution has provided expertise in reviewing applicants' qualifications and the quality of proposed activities.

Over the past ten years, the Bureau of Land Management has developed extensive cultural resource program expertise through the employment of technically trained archaeologists and historians. The Bureau is currently preparing draft guidelines for a permitting system based on uniform regulations being developed by NPS to implement the Archaeological Resources Protection Act. The BLM will continue to rely on NPS expertise in resolving disputes and providing technical service when requested. No impact is anticipated on either BLM or the Smithsonian as a result of not using their expertise.

Question: You discuss the problem associated with unauthorized use and resulting damage to or loss of cultural artifacts. How many cultural resource sites exist in total under your jurisdiction? How many will receive patrol and surveillance in 1983? Is this an adequate level, considering the value of the resource?

Answer: As of the end of Fiscal Year 1980, approximately 75,500 sites had been identified on lands under BLM jurisdiction. This total reflects the number of sites that have been recorded as a result of inventories completed on an estimated 1 percent of the Bureau's total acreage. During FY 1983, we anticipate that approximately 1,050 projects will be undertaken to provide patrol and surveillance to an estimated 23,000 sites. These projects can range from individual sites up to areas of thousands of acres within which numerous sites exist. These interim protection measures offer an adequate degree of deterrence to vandalism at the most important sites and serve to identify sites suitable for more permanent protective measures such as stabilization, fencing, excavation, and the building of interpretive facilities.

Question: You are planning to fund no National Register nominations in 1983. What is the basis for this reduction? How many sites on BLM lands are currently pending nomination? Do you intend to pursue them in the future?

Answer: The Bureau is currently preparing regulations that are counterpart to the regulations of the Advisory Council on Historic Preservation. This provides us with an opportunity to tailor the National Historic Preservation Act compliance process to suit BLM's unique management needs. Rather than continue to emphasize nomination of sites to the National Register, we have focused our program on the development of "use categories" that will assist management in the decisionmaking process.

Past experience has shown that a determination of National Register eligibility, and subsequent nomination is very expensive and does not provide the basis for making decisions concerning the most effective means of protection. The criteria for eligibility, such as a site yielding information that is important in prehistory or history, does not provide options to management as to whether the site should be preserved in situ or scientifically excavated. BLM's new system will define seven such categories that will assist managers in formulating decisions on the value and use of sites.

This does not necessarily preclude the nomination of properties to the National Register. Obviously, sites that are to be preserved in situ with considerable research potential might be nominated at a future time when program funding is available. The Bureau will continue to use the National Register for approved activities that affect lands not under its jurisdiction, such as energy development on private surface areas that contain Federal mineral ownership or lease areas on the Outer Continental Shelf. There are currently 25 sites pending nomination.

WILDERNESS MANAGEMENT

Question: Your request for wilderness management is $12.1 million, a reduction of $1.9 million. Have you made recommendations on 3.6 million acres of non-suitable study areas in the California Desert Conservation Area?

Answer: As part of the California Desert Conservation Area plan and the accompanying EIS, 3.6 million acres were recommended nonsuitable by BLM. They are awaiting final wilderness recommendation by the Secretary.

Question: What does the "one-time aggregation of the planing amendment workload in FY 1982" involve?

Answer: FY 1982 provided the first opportunity to realize a significant cost saving by combining (aggregating) amendments to land use plans at the district level. This aggregation of planning amendments allows us to prepare EIS's covering all wilderness study areas (WSA's) in a district, or combinations of more than one District, if appropriate. Most of the savings are a result of substantial reductions in the number of EIS's required. For example, Nevada consolidated planning efforts in nine resource areas into four districtwide efforts. The States have been given the flexibility to do more aggregating to meet the 1986 deadline, although few additional opportunities remain.

Question: What do you mean by "a substantial shift between 1982 and 1983 in the type and cost of wilderness study products initiated"?

Answer: As a result of aggregating planning amendments, the overall cost of doing studies (including related EIS costs) is significantly reduced. In addition, New Mexico, Oregon and Utah are conducting studies and site-specific analyses at the district level with information being aggregated into one statewide EIS for each of these States. These actions will significantly reduce the number of EIS's required and, thus, the costs of the wilderness study effort.

Question: Describe the GEM (Geology-Energy-Minerals) resource inventory and assessment system? What are the Phase I and II surveys?

Answer: The purpose of GEM is to improve the level of geology, energy and minerals resource data in land use decisionmaking. The term emerged as a part of the CDCA planning effort in which BLM recognized that existing mineral inventories failed to describe the full scope and potential of geologic resources in wilderness study areas.

GEM is used in each wilderness study except where scheduling does not permit, or where minerals data is already adequate to develop initial suitability recommendations. The two-phased approach adopted by BLM allows stopping the process at the end of Phase I, if available data such as geologic maps, remote sensing, air photos, files and claim records, and other agency records or sources of information are sufficient. Phase II includes gathering additional data from ground geochemical, airborne geophysical, Landstat, field verification, and photogeologic mapping (air photos) sources. The GEM assessments should not be confused with Geological Survey/Bureau of Mines mineral surveys required by Section 603 of the Federal Land Policy Management Act of 1976 on areas recommended as suitable for wilderness designation.

Question: In December, environmental groups brought lawsuits in Utah to stop road construction and drill pads discovered in wilderness study areas which were under appeal. What was the outcome of this situation?

Answer: Litigation concerning the stopping of mineral activity in the Utah Wilderness study area was filed on December 9, 1981, by the Utah Wilderness Association v. Watt (C-81-0903A). At present, BLM, GS, the Justice Department, and the attorney for the plaintiffs are negotiating to resolve the plaintiffs' concerns.

Question: What is BLM's current policy with regard to such activity in the 24 million acres still under study for wilderness designation? Are such decisions decentralized?

Answer: Study areas under appeal are administered under BLM's Interim Management Policy (IMP) as are the 24 million acres in wilderness study. Decisions under the IMP are decentralized to area and district managers.

Question: Several recent studies, including one by Oak Ridge National Laboratory and one by Economic Associates using USGS' data, have included data indicating the energy resources in proposed and actual wilderness areas represent very small portions (less than 5 percent) of the nation's total energy resources. Are you familiar with these reports? What is your opinion of them?

Answer: Both the Oak Ridge and Economic Associates' reports were based upon an evaluation of the regional geologic settings of the various WSA's as provided by existing literature. Such evaluations lack the intense site-specific analyses necessary to estimate oil and gas and other energy mineral and non-mineral potential. Particularly with regard to oil and gas, small areas may produce large amounts of resources. Therefore, our decisions regarding the suitability of such areas for wilderness designation need to be based on the site-specific analyses of each area. The BLM is conducting site-specific analyses through GEM assessments, land use plans, and GS/BLM surveys to more accurately address energy and mineral resource potential in specific wilderness study areas.

Question: Considering that wilderness areas represent only three percent of the nation's land resources, do you believe making such areas unavailable for development represents "locking up" our energy resources?

Answer: At present, development of energy resources in designated wilderness is allowed subject to the 1964 Wilderness Act. Valid rights existing at the time of designation will be recognized for mining claimants and/or mineral lessees. Claimants or lessees, depending upon their possessory rights, may extract and go to full development even if these activities will degrade the wilderness character. We must also follow the intent of Congress expressed through any wilderness designation legislation of a particular area. After designation, Section 4(d)(2) of the Wilderness Act of 1964 allows information gathering about energy resources compatible with the preservation of wilderness character. Depending on the national need for strategic or critical energy resources, Congress has the option to declassify or amend the designation legislation to allow development of key energy resources.

Question: What changes have you made with regard to the EIS process for wilderness studies?

Answer: We have not changed the EIS process for wilderness studies.

RECREATION

Question: You are requesting $5.4 million for recreation resource management, a decrease of $200,000 and 5 FTE's. If energy development proceeds as proposed in the western states, what impacts do you foresee on recreation uses of BLM lands? What kinds of recreation needs are most likely to result from these impacts?

Answer: An increase in recreation use on BLM lands may result from energy developments, especially in a number of States that have significant BLM acreages, e.g., Arizona, Colorado, New Mexico, Utah and Wyoming although it is difficult to anticipate the location and extent of the impact. Most of such an increase would probably be dispersed types of recreation (hunting, fishing, rockhounding, 4-wheel drive use). Dispersed recreation management deals mostly with providing users with information and access at a lower cost than management of the more intensively used areas which require use supervision to minimize user conflicts, reducing visitor safety problems, and providing visitors with information on facilities on the public lands and the types of recreation opportunities they are seeking.

Question: Does your 1983 request adequately provide for those impacts and needs? If not, what is the rationale for reducing the program?

Answer: The FY 1983 request is adequate for estimated needs.

Question: Why do you show no workload measures for 1982 and 1983 for visitors served, inventories, and surveillance? What are your estimates for visitors served and surveillance activities in those 2 years?

Answer: We are in the process of revising our workload and output measures for recreation. The measure of "visitors served" is being redefined and will be used in future documentation. "Inventory" was not included in 1983 because we anticipate an extremely small workload in that category. "Surveillance" is not a useful measure except in the California Desert Conservation Area where we have enforcement authority and, therefore, Rangers and Resource Protection/Visitor Service Specialists on duty. As a rule, BLM does not conduct surveillance activities per se. Most detection of law enforcement problems comes about through either citizen complaints or discovery of a problem by a BLM employee on his regular rounds.

The revised definition of visitors served will reflect actual service to the visitor, e.g., providing maps, information, and interpretative talks rather than simply numbers of individuals passing through an area.

Question: You are providing for issuance of 4000 permits in 1983, the same level as 1982. Do you expect requests for permits to remain level in 1983? If they increase, and you cannot issue more permits under this funding level, will more unauthorized use of the lands result?

Answer: We are not able to project what increases, if any, might occur in FY 1983. There may be some increase resulting from a decision to increase recreation fee collections. However, since this will be a priority activity, we believe the proposed funding will be adequate to meet our needs.

Question: Do you have estimates as to the amount of unauthorized use going on? How are you addressing this issue?

Answer: There are no accurate estimates on the amount of unauthorized recreation use occurring on BLM administered lands. The compliance work done by the field suggests it has not been a major problem in the recent past.

Question: How much is included for management of the California Desert Conservation Area? How does this compare to 1981 and 1982?

Answer: The following displays funding for the California Desert Conservation Area:

FY 1981	FY 1982	FY 1983 (Estimated)
$ 1,095,350	$ 1,052,400	$ 917,400

Question: Under Recreation Development, you indicate user fees will be increased in 1983. What are the proposed increases? Whose approval is required before they go into effect?

Answer: BLM recreation fee increase proposals under consideration are as follows:

Recreation Use Fees (Campgrounds, etc.)

These would be raised to the appraised rate (the appraisal should consider all of the criteria in 36 CFR 66.9 including comparable fees at private facilities within the service areas) or at least to the rate suggested by states and districts in the 1981 Recreation Fee Report. Non-fee sites that meet the criteria in 36 CFR 66.9 would be evaluated, and fees would be charged wherever collection would be cost-effective.

Special Permit Fees

At the discretion of BLM State Directors, fees would be increased as follows:

Commercial use fees (other than permits for events that are both commercial and competitive) should be raised to at least $2.00 per user day*, the level suggested in the recreation fee report, or to an amount equal to the cost of issuing and monitoring the permit, whichever is greater;

Competitive use fees (includes competitive commercial events) would be administratively increased to at least $2.00/user day*, 5 percent of the gross, or to an amount equal to the cost of issuing and monitoring the permit, whichever is greatest;

* User day is defined as one person/user in any part of a calendar day (example five people using public lands for 1/2 day each = five user days); user days are based on actual participants, not spectators, unless they are required to pay a fee.

Special area (individual use permit) fees would be raised to at least $2.00 per user day or to an amount equal to the cost of issuing and monitoring the permit, whichever is greater; and

Noncommercial, noncompetitive (over 50 vehicles) ORV use fees would be administratively raised to at least $2.00 per day or to an amount equal to the cost of issuing and monitoring the permit, whichever is greater.

The decision for the fee increases is to be made by the Director of BLM, with review by the Assistant Secretary for Land and Water Resources by August 1982. These increases will be accomplished under existing laws and regulations.

Question: Will these fees reflect fair market value for the activities involved?

Answer: Recreation use fees (campgrounds, etc.) are generally based on the fees charged at nearby public and private areas providing comparable facilities. Therefore, these fees tend to reflect fair market value.

Special permit fees will be based on the cost of issuance and monitoring or on a flat fee, whichever is greater.

Question: How much is included in FY 1983 for recreation inventories? How does this compare to 1981 and 1982?

Answer: In FY 1981, our budget contained $283,774 for recreation inventories. No funding was provided in FY 1982, and none is proposed for FY 1983. Because of the reduced number of Resource Management Plan (RMP) starts and the fact that inventories will only be done when recreation is a management issue or concern, inventory is expected to be a minor program cost in FY 1983.

Question: What is the purpose of these inventories? Are they related to the Resource Management Planning process?

Answer: The purpose of recreation inventories is to identify recreation values and consider them as needed in the resource management planning process.

Question: Are you complying with FLPMA's mandate to provide for outdoor recreation (Section 102) and to conduct such inventories (Section 201)? Will the RMP products be adequate and reflect the required multiple use approach, without this data?

Answer: Recreation inventories are completed as integral parts of all new RMP starts where recreation is a management issue or concern. In most of these planning efforts, recreation is not expected to be a significant issue or concern.

Question: How can you address the need for ORV designations without sufficient inventory data?

Answer: Inventories needed to complete ongoing FY 1982 off-road designations were done in FY 1981. Beginning with FY 1982, ORV designation work is to be done as an integral part of all new RMP starts. Whenever ORV use surfaces as a significant management issue or concern, inventory information will be available to complete designation for that area. Thus, inventory data should be sufficient.

Question: Are you meeting the FLPMA mandates and your own regulations, requiring you to limit ORV use in areas where critical resource management, visitor safety problems or user conflicts are occurring?

Answer: Yes, we are. ORV designations have been completed or are in progress for all major problem areas. We can also implement emergency designations in any nondesignated area where ORV use management surfaces as a significant management issue.

FIRE MANAGEMENT

Question: You are requesting $9.2 million for fire management, an increase of $2.0 million. How much of the request is for the Boise Interagency Fire Center? Provide a breakdown of funding and staff for the 3-year period by the various activities carried on at the Center as described on page 125 and any additional activities.

Answer: Tentative plans have been made for FY 1983 based on the requested budget. Planned funding for the Fire Center is as follows:

FIRE MANAGEMENT FUNDING

Boise Interagency Fire Center
($000)

	1981	1982	1983
Administration	$287	$308	$329
Training	261	273	292
Communication/Weather	39	17	18
Equipment Research and Development	75	73	78
Fire Support	183	213	269
Aviation Support	105	111	119
Base Program Total	$950	995	1,105
Initial Attack Management System - Lightning Detection and RAWS 1/	-	-	1,650
Total	$950	$ 995	$2,755

1/ Items will be acquired and managed at BIFC for field operations.

OTHER FUNDING

Boise Interagency Fire Center
($000)

	1981 1/	1982 1/	1983 1/
Administration	$ 814	$1,212	$1,409
Training	160	183	196
Communication/Weather	480	524	561
Equipment Research and Development	-	-	-
Fire Support	270	288	308
Aviation Support	1,158	1,232	1,317
Total	$2,882	$3,439	$3,791

1/ The "other funding" that supports the Boise Interagency Fire Center involves Data Management, EEO, Building Maintenance, General Administration, and Fire Presuppression activities.

Boise Interagency Fire Center

Breakout of "Other Funding" for BIFC is as follows:

Appropriations/Subactivities	($000) FY 1981	FY 1982	FY 1983
Management of Lands & Resources			
Data Management	$ 64	$ 59	$ 59
General Administration (including EEO)	699	654	654
Firefighting-Presuppression	1,423	2,019	2,371
Construction & Maintenance			
Building Maintenance	196	207	207
Contributions	500	500	500
Total	$ 2,882	$ 3,439	$ 3,791

FTE'S

Boise Interagency Fire Center

	1981	1982	1983
Administration	44	61	70
Training	17	18	20
Communication/Weather	21	22	23
Equipment Research and Development	3	3	3
Fire Support	18	20	23
Aviation Support	10	13	17
Initial Attack Management System-Lightning Detation and RAWS	-	-	5
Total	113	137	161

1/Does not include FTE's funded from Fire Suppression funding (4600).

Question: What are the costs for the fire prevention contracts for 6 million acres protected by other agencies? How does this compare to previous years, both in number of contracts and funding?

Answer: None of the BLM contracts are prevention contracts; they are fire suppression preparedness contracts. The contracts also provide that additional funds will be paid to the state to reimburse any actual suppression costs. Contract amounts for these five contracts have remained the same for the past several years.

	State Contract		Forest Service Contract		BLM Cost/Acre
California	$ 823,000	$.36/acre	1/$ 86,000	$1.23/acre	$.08/acre
Idaho	1/ 83,000	.21/acre	102,000	.59/acre	.15/acre
Montana	1/ 31,000	.20/acre	0	0	.08/acre
Oregon	2/ 1,248,000	.48/acre	13,000	.54/acre	.26/acre
Washington	32,000	.30/acre	17,000	.39/acre	0

1/ These states are working toward exchange agreements where BLM will provide protection on a block of land in exchange for similar protection by the state.

2/ This agreement is being modified to reduce state involvement.

Question: The increase of $2.0 million is for the first phase of a 3-phase cost-saving program. How did you determine the Automatic Lightning Detection System (ALDS) and Remote Automatic Weather Stations (RAWS) would be cost-effective fire management systems? What are the estimated "cost-savings"?

Answer: Based on actual experience in Alaska, we determined that with the lightning detection system we could detect 50 percent of our fires in time to contain them below 10 acres in size. In addition, we have eliminated certain exotic aircraft that were used for detection prior to ALDS.

Savings

a.	Replacement of a high altitude jet to locate lightning storms. Annual savings	$ 500,000
b.	Replacement of personnel to monitor radar to detect thunderstorms. Annual savings	40,000
c.	Annual reduction in costs for fires exceeding 10 acres in size, based on projection of Alaska information. Annual savings	4,850,000
	Annual savings, average year	$5,390,000
	Annual cost based on 10-year life of system	$1,158,000

Question: How much has been spent to date to install the ALDS? What will the total cost of the systems be? What is the timing for completing implementation? Provide a detailed schedule by location, by year, for the record.

Answer: The funding history for ALDS follows:

1974	$ 24,000	2 ALDS units	- MLR
1976	$ 72,000	6 ALDS units	- MLR
1977-78	$162,000	28 ALDS units	- MLR
	$ 72,000	29 Remote Automatic Weather Stations	- Other Agency

$730,000 annual operating cost since 1977 from 4600 emergency preparedness funds for detection.

Projected completion for ALDS is 1985. The following intermediate benchmarks have been established:

(1) 1983 acquisition of automated distribution system and completion of tests in Oregon, Montana, Idaho, and Arizona. ALDS operational in 11 Western States and Alaska. Information distributed to 11 State Offices, BIFC, and two District Offices.

(2) 1984, C level budget. Provides for completion of the remote automatic weather station (RAWS) grid in 10 Western States and distribution of information to 53 field offices in the Western United States and Alaska.

(3) 1985 anticipates intensification of RAWS grid in 10 Western States, plus some capability to utilize project weather units.

Question: Is funding included under this activity for aircraft and/or helicopters for firefighting purposes? If so, provide detail for the 3-year period as to costs, numbers of aircraft, etc.

Answer: Fire management funds do not provide any funding for firefighting aircraft. Aircraft availability guarantees and presuppression flight time are paid from emergency fire funds at the same level as in FY 1982.

Aircraft Guarantees

	FY 1980	FY 1981	FY 1982 To Date	Full Year Estimate
Costs ($)	4,014,743	4,424,547	763,102	4,400,000
Aircraft (#)	72	64	24	69

Question: Is the $1.5 million request for equipment all for computers? Provide a breakdown for the record.

Answer: The following is a breakdown of the $1.5 million equipment request:

IAMS Central Processor	$ 300,000
Remote Automatic Weather Stations (RAWS)	72,000
Fuel Typing Software	100,000
IAMS Central Processor Software	450,000
Field Office Terminals	230,000
IAMS Central Processor Maintenance Contract	100,000
	1,252,000
Test equipment, supplies, materials, and facilities conditioning	296,416
	$1,548,416

PLANNING

Question: Your request for planning is $7.1 million, a decrease of $1.5 million and 65 FTE's. You are revising the planning regulations "to remove procedural guidance that restricts flexibility" and to make "noncontradiction the test of conformance." When will the new regulations go into effect? What is the "procedural guidance restricting flexibility" that will be removed?

Answer: We expect to publish the planning regulation amendments in the Federal Register approximately May 18, 1982. They would become effective 30 days later. There are several examples of "procedural guidance restricting flexibility." Probably the best example is the requirement to revise each plan every 10 years. We believe plans should be revised as needed. This approach bases plan revision on management factors and public comments on the planning schedule published annually by the Bureau. Another example is the absence of a specific role for the Area Manager in the existing regulations. The Area Manager is not mentioned though in practice that official has major planning responsibilities.

The existing regulations spell out in detail the distribution of completed plans. We believe that that should be determined by local Bureau officials in accordance with public participation and the community interest. Also, regulations are not the appropriate vehicle for providing procedural details on the format of plans. Such guidance belongs in the Bureau Manuals as we have proposed.

Question: Can you explain what you mean by making "noncontradiction the test of conformance"?

Answer: What is meant by making "noncontradiction the test of conformance" is that if a BLM plan does not contradict another agency's plan, the BLM plan is considered to be consistent with the other agency plan.

Question: What level of BLM management will have the flexibility to determine the level of planning effort? How will you determine the "degree of risk" involved, and who will make that determination?

Answer: District managers, with the concurrence of State Directors, will determine the level of planning effort as well as how much risk is acceptable.

The degree of risk to be taken will be determined through legal and regulatory analysis to ensure legal and regulatory requirements are met, based on funding levels, Bureau experience in completing plans and EIS's, the level of issue significance (public and government interest or concern about the issue), and technical risk analysis where possible.

Question: What will be the basis for deciding when to use MFP amendments instead of developing RMP's? Who will make that decision?

Answer: MFP amendments will be used in place of RMP's when:

1. An adequate MFP is in place. Basic standards for determining whether or not an MFP is adequate are included in the planning regulations. We also consider timeliness

and accuracy of data and information in the MFP and appropriate coverage of resources in the plan relative to the manager's decision requirements, or

2. The action requiring the plan is limited to that single issue and no other significant issues need resolving in the plan, or

3. It would cost less to do an MFP amendment to consider the action requirement than to do an RMP.

State Directors, with the recommendations of District Managers, will make the determination.

Question: Under FLPMA, how long can you continue to manage under existing MFP's? Does your budget allow you to maintain a planning schedule in compliance with FLPMA?

Answer: FLPMA does not designate either how long existing MFP's may be used or any particular planning schedule.

BLM intends to use MFP's for resource management decisions as long as they are considered adequate and will replace them on an as-needed basis.

The proposed budget provides funds to meet current requirements for court-ordered grazing EIS schedules, wilderness studies in selected RMP's (and MFP Amendments), and energy and minerals demands.

Question: What impact will the proposed changes have on public participation in the planning process? On coordination with State and local governments?

Answer: The proposed amendment would not substantively change public participation or coordination requirements.

BLM strongly supports and advocates a vigorous public participation program. The entire RMP system depends upon public input at key steps in the process. Coordination with State and local governments is also a key factor in all of our planning and is required by the regulations.

Question: Will the new regulations change the environmental study process associated with the plan? If so, describe what you will be doing differently.

Answer: The proposed amendment does not change the environmental impact statement process associated with preparation of Bureau plans.

Question: How much is included in your 1983 request for Alaska? What activities will this include? Will this level allow you to comply with ANILCA requirements?

Answer: Our FY 1983 request for Alaska includes approximately $502,000 that will allow completion of ANILCA requirements. Steese and White Mountain plans will be completed by the end of FY 1984. Funding will also allow participation in the Bristol Bay Cooperative Plan by BLM. All ANILCA requirements are expected to be met ahead of or on schedule.

Question: You state the planning program will support the coal and oil shale programs, which will require RMP's as a base starting in FY 1984. How many RMP's will need to be completed by FY 1984 to meet this requirement?

Answer: BLM expects to complete approximately 20 RMP's by the end of FY 1984. Eight of these will include consideration of coal, and two will consider oil shale resources. The MFP amendments will be used in several areas for these resources where they would be more cost effective than RMP's.

Question: If a plan indicates the priority use for a resource area should be different than that established in national priorities (i.e., placing recreation or wilderness over energy development), what will be the impact? What if energy development had already been initiated under your accelerated programs in FY 1983? Why shouldn't planning be accelerated to provide the base for decisionmaking first, then implement the decisions, rather than accelerating or emphasizing one use over others before the data necessary for that decision is available?

Answer: The national priorities determine which areas should receive the funding priority for a specific year. Every resource area does not contain all of the resource issues. A plan is not normally needed to determine what the driving uses or issues are but rather to evaluate possible solutions. The impact on a resource area that does not have any national priority issues is that it will fall lower on the planning schedule than a resource area that has national priority issues.

Question: At the rate proposed in this budget, when will you complete Resource Management Plans for all your resource areas?

Answer: Planning is initiated by the local managers' decision requirements and the driving issues involved. Some areas may not require an RMP for a number of years, if ever. At the proposed budget level, we anticipate completing an average of 15 RMP's per year.

Question: Do you have any data yet as to the cost per plan of the four plans that will be completed in 1983? Which areas do they cover?

Answer: Cost-per-plan estimates are very sketchy at this point because the "Pilot RMP's" are experimental in nature. Since we have not completed one and we are trying several methods in their development, the estimates cover a wide range ($400,000-$800,000). We also believe that the cost of the pilots is much higher than later RMP's will prove to be once we have gained experience and have settled on a firm method for their preparation. The four RMP's scheduled for completion in FY 1983 include:

1. Kremmling Resource Area, Colorado
2. Glenwood Springs Resource Area, Colorado
3. Headwaters Resource Area, Montana
4. Wells Resource Area, Nevada.

Question: What use will be made of the six pilot RMP's?

Answer: The pilot RMP's will be used to test RMP concepts, procedures, and methods. We have been and will continue to transfer what is learned from the pilots to the other States for their use in developing future RMP's.

We also use information and techniques learned from the pilots to develop and refine guidance that will be published in FY 1982 by the Washington Office for use throughout the Bureau.

Question: If the program were not decreased in FY 1983, how many additional plans could be initiated? How many could be completed? What would be the impact on your overall schedule?

Answer: Approximately three to five new RMP's could be initiated if the program were not decreased. No additional RMP's could be completed in FY 1983 because of the two-year completion time.

The primary impact on the schedule would be that several MFP amendments would be shifted to RMP's, and one to three additional RMP's would be started. In total, this would affect three to five plans.

DATA MANAGEMENT

Question: You are requesting $12.9 million for data management, an increase of $0.9 million. Can you be more specific as to what the planned procurements and equipment will provide; and which locations will receive the increases?

Answer: The Administration is emphasizing renewed efforts on energy and minerals development, such as oil and gas, oil shale, and coal. To support this work, additional capability is required to provide the necessary tools. The proposed $.9 million increase would be used as follows:

Equipment- The priorities of the energy and minerals program dictate the requirement for additional components to the mainframe computer, such as disk drives for mass storage ($400,000) and a flatbed plotter ($100,000). The additional storage is needed to handle the increase in energy and minerals work, such as oil and gas leases and land status work. The plotter will provide graphic products we presently do not have the capability to produce. These will be used in project support for energy, minerals, and land status work. The plotter and disk drives would be used at the Denver Service Center.

The State Offices will need $150,000 for additional terminals and peripheral equipment as programs such as energy and minerals expand.

Procurement - $250,000. This will cover increased costs for maintenance of equipment, supplies, and materials, and telecommunication costs Bureauwide. It will also cover increased costs for support contracts for the mainframe computer and the remote sensing program.

Question: How much of the request is for the graphics minicomputer system? Is this the total cost required? Detail the cost savings you estimate from acquisition of the system.

Answer: The request contains $450,000 for a graphics minicomputer; this is the total amount required. The new mini-computer will replace the current six-year old computer; the life cycle is five years. We are unable to provide a breakdown of cost savings; however, the automated method is expected to be 50 percent cheaper than the manual method.

CADASTRAL SURVEY

Question: Your request for cadastral survey is $20.3 million, an increase of $0.8 million. The increase is equally divided between the Alaska program ($9.9 million), and other States ($10.4 million). Describe the various methods by which you carry out surveys (BLM personnel, contract, other agencies). What are the limitations on providing surveys on a reimbursable basis? Are you able to use private funds, if offered, to conduct surveys, including related costs, such as personnel travel? If restrictions were removed, what impact would you estimate it might have on the level of surveys you could perform with your available staff and funding?

Answer: The primary method of executing cadastral surveys is BLM in-house surveyors and technicians doing surveys and resurveys for all agencies under the sole Federal survey and resurvey authority. Contracting for largescale survey in Alaska was started in 1974 to supplement BLM's in-house capability and has worked very well. The focus of Alaska surveys is completing initial surveys rather than the complicated resurvey procedures of the lower 48 States, thus the success of contracting in Alaska.

BLM has memoranda of agreement with the Forest Service and Park Service which provide the standards for these agencies to execute surveys and resurveys. Executing surveys under BLM's authority requires that BLM issue Special Instructions (the legal documents that authorize the surveys) and assignment instructions to a particular surveyor and officially approve and file the survey data in the BLM records. The surveys that are completed for other agencies are on a reimbursable basis.

There are no real limitations on reimbursable surveys except that BLM has difficulty maintaining a proper number of surveyors when the other agencies have fluctuating funding levels.

BLM is able to use private funding. However, individuals would be subject to the same administrative overhead assessments as are other agencies. Availability of Cadastral Survey personnel to monitor the contracts would also have to be considered.

Question: The request for the Alaska program is $9.9 million, an increase of $0.4 million. Why have your goals for completing surveys of land selected under ANCSA and land selected by the State both been extended, from 1985 to 1990 and from 1995 to 2005, respectively. In your 1982 request, you planned to do 370 native allotments; why are you estimating only 200 will be accomplished?

Answer: As the Alaska surveys progressed, the larger portions were surveyed first, resulting in very impressive accomplishment figures, both in miles surveyed and costs per mile. These larger portions were surveyed with the more advanced equipment such as the Auto Surveyor, which unfortunately does not lend itself to the smaller portions that now have to be surveyed with more conventional methods. Goals were revised to show a more realistic rate of accomplishment in the smaller tracts.

Question: What are increased costs associated with the remaining ANCSA and State selections, involving changes in climate, terrain, and logistical support?

Answer: The majority of the remaining ANCSA and State-selected lands are located in areas that are difficult to access for longer periods of time due to remote location and adverse weather conditions. These areas are not suitable for new technology survey applications such as the Auto Surveyor, due to frequent and severe changes in terrain and ground cover. In these areas more conventional survey methods will require additional personnel and time and inherent cost increases. The requested funding level is adequate to meet priority needs.

Question: For the other States, you are requesting $10.4 million, an increase of $0.4 million. In all cases, you will accomplish less at the base level than you estimated in your 1982 request, even though we provided an increase to the program in FY 1982. Can you explain why?

Answer: In general the FY 1982 funding level ($9,852,000) in direct dollars closely approximates the FY 1983 base funding level

($9,984,000). FY 1983 base funding is only $132,000 or 1 percent higher than FY 1982. FY 1983 base funding acreage accomplishments are lower than FY 1982 by an average of only 8 percent. This decrease is the result of minor overestimates of accomplishments in FY 1982 and higher FY 1983 survey costs.

Specifically, the funding level for FY 1982, ($13,888,000) included $4,036,000 of general administration costs that were not included in FY 1983 base funding. As a result, the comparable direct dollar base funding for 1982 was $9,852,000. The FY 1982 Budget Justifications requested a decrease of $1,898,000. Congressional increases were made from this reduced level and not from the FY 1982 base. When also considering the overall 4 percent reduction the final FY 1983 base in direct dollars is $9,984,000. This figure is only $132,000 or 1 percent high than the FY 1982 base. As a result, even with a Congressional increase, base funding for FY 1982 approximates FY 1983 base funding. Therefore, accomplishments should be similar. The FY 1983 Budget Justifications show FY 1983 acreage accomplishments 8 percent or 315,000 acres lower than estimates of FY 1982 made one year earlier. As mentioned above, this results from earlier over-estimates of FY 1982 accomplishment and more recent estimates of FY 1983 which reflect somewhat higher survey costs due to inflation.

Question: How will you accomplish the proposed increases with the same staff level?

Answer: We estimate that the proposed increase can be accomplished without increases in personnel through the development and use of more efficient work schedules and crew assignments.

Question: Will the increase of 45,000 acres for energy development, to a total of 665,000, be adequate to meet the needs of your proposed expansion in energy development?

Answer: The proposed increase in accomplishments for energy development is adequate to support proposed expansion in development.

FIREFIGHTING

Question: Your request for firefighting and rehabilitation is $4.8 million, an increase of $0.2 million. Can you explain what the situation is regarding the necessity to charge the salaries of permanent equivalent personnel to this account on a deficiency basis? What is the relationship to the decrease of 99 FTE's? What impact will this have on program funding?

Answer: The request for firefighting and rehabilitation funding was reduced in FY 1982 by 4 percent. This request restores that level and requests authority to fund permanent positions from this fund.

In the past BLM has used firefighting funds to help pay the salaries of short-and long-term seasonal employees with permanent appointments

(WAE's) and temporaries. However, due to the OMB change to a full-time equivalent employment control system in FY 1982, WAE employees are now being charged against the permanent equivalent ceiling. BLM is requesting approval to commit a large part of the $4.8 million firefighting and rehabilitation funding to permanent salaries. This will allow BLM to conduct a safe, efficient fire organization for the BLM-administered areas. It does provide a decrease of 99 FTE's. These positions were primarily associated with activities BLM conducted to assist the Forest Service, National Park Service, Fish and Wildlife Service, and Bureau of Indian Affairs at the Boise Interagency Fire Center, and in Alaska. It may be necessary for these agencies to provide manpower and funding at these locations if they desire the services to continue. Both the Fire Center and Alaska are beginning planning processes that will identify this interagency requirement.

Question: You have requested a firefighting supplemental request of $60.0 million. To what do you attribute the increase in fire costs in 1981, and in the first half of FY 1982? What were actual obligations incurred from January 1981 through September 1981?

Answer: Fire costs in FY 1981 and 1982 were a little higher due to the severe fire conditions that existed in the Great Basin and southwestern desert. Fire emergency obligations for January through September 1981 were broken down as follows:

Emergency preparedness	$20,623,000
Emergency suppression	26,400,000
Subtotal	$47,023,000
Carryover	13,000,000
	$60,230,000

Question: Explain the $5.0 million O & C payback.

Answer: In FY 1980, BLM requested that $5 million of the fire suppression supplemental be deposited in the O & C Land Grant Fund to cover deficiencies caused by reduced timber receipts. Permission to transfer funds was granted in Public Law 96-304, of July 8, 1980, provided that the funds "shall be reimbursed to fire suppression for the O & C Land Grant Fund at such time as available receipts exceed amounts necessary for western Oregon timber management."

Question: Are you able to use the firefighting personnel for other BLM activities, such as on-the-ground work, when they are not engaged in firefighting? What would be the limitations on such an approach?

Answer: Firefighting personnel can be used for other project work when not engaged in firefighting, under the following limitations:

-- If the work is planned, they must be paid by the benefiting activity.

-- Where work is unplanned it must be interruptable and terminated as soon as a fire call is initiated.

-- Any work performed must be in a fire problem area, and the personnel must be accompanied to the job by the fire equipment.

RESOURCE PROTECTION

Question: Your request for resource protection is $2.0 million, an increase of $0.5 million. According to the report, BLM has 26 special agents. Is this correct? Do you believe that is an adequate number to address your enforcement needs? Where are these agents located?

Answer: Presently, the Law Enforcement Program has 23 Special Agents (Criminal Investigators). BLM now has comprehensive law enforcement authority and has developed the nucleus of a law enforcement staff. The number of Special Agents is adequate to accomplish the priority resource protection goals. The Agents are located in each of the Western State Offices and the Eastern States Office.

Question: Do you use part-time employees as law enforcement officials? Is that allowed under Departmental regulations?

Answer: The Law Enforcement Program does not use part-time enforcement officials. Although not prohibited by regulation, the practice of not using part-time employees to enforce rules and regulations on the public lands has been a matter of Bureau policy.

Question: The GAO criticized the lack of effective, uniform and timely management information systems. Do you believe such a system would be helpful? Is this need being addressed, either at the Bureau or Departmental level?

Answer: The use of a management information system is under review. With the present program size, it is not deemed cost effective at this time. However, if the program increases in size and with the advent of the use of Violation Notices, such a system may be necessary.

Question: You are shifting resources away from mineral theft and wild horse and burro violations, toward theft and destruction of property and recreation site violations. What is the basis for the shift?

Answer: Each State Director sets priorities for his law enforcement staff. The criteria used to establish the priorities include the following:

A. Likelihood of successful, cost-effective resolution.

B. Value of the resources involved and/or relationship of individual incidents to an aggregate pattern.

C. The sensitivity of the case to resource management objectives.

The coal investigations in the State of Alabama are almost completed, which will result in a reduction in caseload.

The investigation concerning fraud in the Oil and Gas Lottery System is now under the investigative authority of the Inspector General.

After the intense investigative activity into the abuse in the Wild Horse and Burro Program, violations have decreased. Changes in adoption procedures have reduced the abuse of the total system, and many compliance checks previously handled by Special Agents are now being performed by Wild Horse and Burro Compliance Specialists.

Question: Part of the increase will fund 18 additional cooperative agreements with the States, for a total of 68. You had estimated last year 52 agreements would be in place in 1981, but only 33 agreements were signed. What is the reason for the decrease? Can or do these agreements involve any stipulations requiring local enforcement units to meet Federal standards? Is 68 an adequate number of such agreements? Could you do more if funding were available?

Answer: The actual cost of the negotiated agreements was more than planned; therefore, fewer agreements were signed than originally estimated.

The agreements do not require local enforcement units to meet Federal standards because they are not actually enforcing Federal laws or regulations.

The proposed funding level will cover 68 agreements in FY 1983 and will provide adequate coverage in the most severe problem areas.

Question: Do you have any estimates as to the total value of losses incurred through theft, destruction of property or other resource losses, for the past year? If you have a rough estimate, how would it compare to the cost of providing a more adequate level of protection?

Answer: Most crimes and unlawful activities on lands administered by BLM fall under the jurisdiction of local law enforcement agencies. As such, BLM has had no program need to gather value statistics concerning losses incurred through theft, destruction of property or other resource losses. BLM has a reporting system to gather and maintain statistics concerning its Law Enforcement Program. We are currently testing systems to improve the accuracy and timeliness of the statistics on a Bureau-wide basis and will continue to develop and improve the existing reporting system. However, a comprehensive reporting system for crimes and unlawful activities committed on the 750 million acres onshore, and over 1 billion acres offshore administered by BLM would be prohibitively expensive and would have minimum utility.

MAINTENANCE

Question: Your request for maintenance and engineering services is $11.0 million, an increase of $1.3 million. Under Buildings Maintenance, you will complete 94 technical surveys to identify opportunities for reducing energy consumption and provide retrofit maintenance on 21 buildings. How long has this effort been underway? Will all surveys be completed in 1983? What has the total cost been? How much is included in 1983 for this effort? What are the estimated cost savings of the 21 retrofit projects you are undertaking in 1983? What are the total cost savings projected to be realized when this effort is complete?

Answer: The technical surveys and the retrofit maintenance are part of the on-going energy conservation program which has been underway since about 1975. All surveys will not be completed in FY 1983. We are surveying about 5 percent of our buildings each year. We do not have this kind of total cost information readily available, but we would estimate between $175,000-250,000 has been spent on technical surveys. In the justifications the cost to do 94 technical surveys is estimated to be $188,000, or $2,000 per unit.

Based upon the type of retrofit taking place, e.g., insulation, storm windows, more efficient heating and cooling equipment, we can expect energy savings each year to be 15 to 20 percent of pre-retrofit annual energy costs.

Question: You provide maintenance on 579 buildings each year. How many buildings in total require maintenance? What is the basis for selecting 579 to receive maintenance?

Answer: There are a total of 1,441 buildings on our inventory. The 579 buildings represent those identified by the States as having their highest priorities within available funding.

Question: Is this an adequate level?

Answer: The proposed level will adequately provide for the health and safety of employees and the public and protect the capital investment.

Question: Why is most of the maintenance work performed through contractual services? What would be the cost to perform the same level of work with Bureau personnel?

Answer: We do cost-benefit analyses to determine whether contracting is less expensive than force account. Our total maintenance program includes not only buildings, recreation, and transportation maintenance, but also range improvements, utilities, soil, air, and water and rangeland management programs, all of which are considered in our analyses. In most cases, because of widely scattered locations, the need to move maintenance people from job to job, the limited personnel ceilings, etc., it would be more expensive to have our personnel, with the required variety of expertise, perform the maintenance work.

Question: How much of your routine maintenance is performed under contract?

Answer: Approximately 60 percent of the routine maintenance is performed through contracting.

Question: The request for recreation maintenance is $3.6 million, an increase of $0.3 million. Explain what would be involved in including a periodic maintenance schedule as part of the design requirements on all new projects. Have you decided whether to do this?

Answer: The inclusion of a periodic maintenance schedule as part of the design requirements or new projects would involve defining routine operation and maintenance needs of facilities as related to specific products which have been specified or furnished, then setting up painting, equipment replacement, etc., schedules for future maintenance planning. Such schedules are now being included in our design and maintenance manual sections.

Question: You state the 1983 budget will be the first step in the development of an adequate preventive maintenance program. What will be involved in developing an adequate program? Is your 1983 request an adequate level to meet the needs identified? Why are you adding five contract specialists to the staff?

Answer: The key to developing a more effective program is acquiring better visitor use data and an inventory of maintenance needs. This information is then used to develop maintenance standards, plan maintenance cycles, and implement action.

The FY 1983 request is adequate to meet the identified needs.

We anticipate that more maintenance will be done by contract and that five additional contract specialists will be needed to prepare and supervise these contracts.

ENGINEERING SERVICES

Question: You are requesting an increase of $176,000 for engineering services, for a total of $1.1 million. What kind of technical assistance is provided from this activity to resource management programs?

Answer: The major kinds of technical assistance to resource management programs include: (1) assistance in the design and maintenance of range and watershed improvements such as water-structures pipelines, livestock (and wildlife) water wells; (2) assistance in computerized road design for timber sale roads, advice on standards for mineral and oil and gas type roads, stream gaging station design, reservoir siltation studies, and fencing designs; and (3) standard specifications and drawings for all kinds of range improvements and watershed projects as well as the development of technical papers and field guides.

Question: Last year, $2.5 million was requested for a new initiative in dam safety work in the January budget, and removed in the March revision. It was not added back by the Congress. How is this effort included in the base effort? How much is included in 1982 and 1983? What exactly is involved in this effort?

Answer: The FY 1983 base program includes $25,000 to fund one FTE to provide technical assistance in the dam safety program. In FY 1982 there will be a $150,000 contract for inspection of the Bureau's most significant and high hazard dams. In FY 1983, 10 workmonths are planned for technical guidance on field inspections, inventory, and emergency preparedness planning.

Question: Part of these funds go for operation of two sign shops. How much is included for this activity in 1982 and 1983? What would the comparable cost level be if Prison Industries were used for this purpose? Why are two facilities needed rather than one?

Answer: The amounts planned for sign shop operation for FY 1982 and FY 1983 are $190,000 and $176,000 respectively. If Prison Industries were to do our signs, it would cost approximately 40 percent more for routed signs and 40 - 45 percent more for traffic control signs.

The two sign shops serve different BLM States and produce highly specialized signs in small quantities because signs vary from area to area. The two sign shops reduce lead time in acquiring signs and keep transportation costs; to a minimum. In addition, neither building is large enough to house the total operation; and extensive renovations would be required.

Question: Are all of the Bureau's engineering services, including survey and design for all construction projects, funded under this activity?

If so, how much is included for survey and design in FY 1983? What specifically will be accomplished under this activity? Provide a detailed breakdown for the record, if necessary.

Answer: Only about 25 percent of the Bureau's total engineering services work is funded from this activity. The remaining 75 percent is funded by the individual programs. No survey and design funds are included in engineering services for FY 1983. Workload accomplishments included in engineering services are:

Facility Maintenance Studies
Building Condition Survey, including electrical, mechanical sanitation, structural and energy conservation inspections and analysis
Site studies for future project needs
Technical Assistance on drinking water system maintenance and inspection to meet health and safety requirements
Space - Office and housing review and analysis
Construction contract inspection
Bridge condition surveys and load ratings (requires a registered engineer)
Technical Assistance for R/W stipulations, compliance and design approval for energy and minerals programs
Technical Assistance for Transportation
Systems Management
Dam Safety Inspecting and Analysis
Sign Shops

GENERAL ADMINISTRATION

Question: Your request for general administration is $78.6 million, a decrease of $1.7 million. In reviewing the Yaquina Head reprogramming proposal, the Committee learned a 5 percent "overhead charge" was made against the acquisition funds that were provided. Why was that done, since the Land Acquisition account included separate funds for acquisition management? Are there any other such surcharges leveled against programs or projects, not identified in the General Administration account? If so, identify them for the record.

Answer: The 5 percent "overhead charge" was not assessed for General Administration. Only those items listed in the Fund Source Table on page BLM-164 are General Administration credits or surcharges.

The 5 percent from the Yaquina Head funds was an initial estimate of non-General Administrative costs of doing business. These costs would include typing acquisition documents, management's time on the project and Denver Service Center costs incurred in reviewing appraisals and other documents related to the project. Any funds not needed can be restored to pay for land acquisition; and at the time of the reprogramming request, we were prepared to use all of this 5 percent toward land acquisition payments.

Question: You are requesting $5.5 million for executive direction, no increase from the 1983 base but an increase of almost $0.4 million over 1982. Explain how this increase was derived.

Answer: The $372,000 increase in executive and managerial direction is a result of the FY 1982 Executive Pay Increase. The FY 1983 funding level has been increased approximately 7 percent to accommodate the salary increases.

Question: How many positions or FTE's are associated with the offices of the Assistant Directors, funded out of the appropriate programs? Provide a breakdown, including source and amount of funding, for the record.

Answer: The data in the following table, for FTE's, funding sources, and funding levels associated with the Assistant Directors' staffs are estimates based upon the FY 1982 operating budgets. The data is not precise because individual office operating budgets are not prepared until after the appropriations have been passed.

Office	FTE's	Funding Level	Funding Source
Assistant Director, Renewable Resources	3	$105,000	MLR - Renewable Resources
Assistant Director, Land Resources	5	$175,000	MLR - Lands and Realty
Assistant Director, Onshore Energy & Mineral Resources	2	$ 70,000	MLR - Energy and Minerals Management
Assistant Director, Offshore Energy and Mineral Resources	2	$ 70,000	MLR - Offshore Energy
Assistant Director, Technical Services	5	$175,000	MLR - Cadastral Survey, Fire Resource Protection

Question: How much is included in this request for the Denver Service Center? What is the total funding for this location? How many FTE's are included?

Answer: This request includes approximately 2 FTE's and $110,000 for executive direction at the Denver Service center. The total FTE and funding levels associated with General Administration for the Service Center will be approximately 200 FTE's and $6,500,000.

Question: Why are only 47 FTE's shown for managerial direction of the 55 district offices?

Answer: Only 47 FTE's are shown for managerial direction of the 55 district offices because the district managers do not charge all of their time to General Administration. A portion of their time is charged to the various resource programs.

Question: Under Other Management Support, you are zeroing out the firefighting salary for FTP employees who normally work other activities. Please explain what this means. How many employees are involved?

Answer: Under the old, but still existing financial management and time and attendance systems, regular time of FTP people is charged to General Administration, where a certain amount of time was planned for an unspecified number of people that may be involved in firefighting during the year. We are now changing the financial management and time and attendance system so that the regular time firefighting costs for people who are called upon occasionally to fight fires are planned, recorded and charged to fire suppression instead of General Administration.

The 8 FTE's planned for regular time firefighting will be used by approximately 600 employees during a normal fire year.

Question: What kind of activities will be reduced or eliminated when support staffs are reduced by 7 FTE's?

Answer: The reduction of 7 FTE's in the support staff will not result in the reduction or elimination of any activities. We intend to improve organizational and procedural efficiency and provide the required amount of support with fewer people.

Question: Do you know why employee compensation is almost doubling in FY 1983 (from $992,000 to $1,756,000)? You are requesting $200,000 for unemployment compensation. How many employees are you assuming will be terminated or placed on longer furlough in FY 1983?

Answer: The costs of employee compensation are estimated and determined by the Department of Labor. The 1983 costs of compensation and medical benefits have increased over prior years due, in part, to higher salary levels which form the basis for compensation, two cost-of-living increases, and the increased cost of medical care. Government-wide injuries also increased over the previous reporting period and, more importantly, both initial claims for compensation and long-term disability and death cases have increased.

BLM has no history on which to base its estimate for unemployment compensation. The estimate of $200,000 is conservative but is not based on specific projections of employee terminations or furloughs.

No terminations are planned for 1983, as reductions in employment are expected to be accomplished through attrition.

Question: Of the 4,998 full-time permanent positions estimated in 1982, how many are currently filled? How many personnel have been terminated in FY 1982? In FY 1981?

Answer: BLM does not keep track of personnel on the basis of individual appropriations; however, of the 6,096 full-time permanent (FTP) positions estimated for the entire Bureau in FY 1982, 5,674 (or 93 percent) were filled as of February 1982. No personnel have been terminated in FY 1982 because of budget constraints.

Question: What are your FY 1982 requirements for the October pay raise? How will these costs be provided? What costs are included for Departmental Services, such as library, etc.?

Answer: The FY 1982 requirement for the October pay raise is approximately $10,712,000. We are requesting a pay supplemental for $3,728,000 and will absorb the remaining $6,984,000 in the various appropriations.

The cost of Departmental Services is included in space costs and is estimated to be $500,000.

CONSTRUCTION, ACCESS AND LAND ACQUISITION

Question: Your request for construction, access, and land acquisition is $2.7 million, a decrease of $2.9 million. What is the unobligated balance of $2.9 million brought forward from FY 1981? Why do you assume it will remain unobligated at the end of FY 1983?

Answer: The $2.9 million represents projects authorized in earlier years which are now under design and will be under contract late in FY 1982. They were projects which were included in the proposed OMB recission of 1981 and could not be started sooner. In addition, problems in acquiring building sites and modifications of existing contracts contributed to the non-obligation. The Elko and Yuha projects make up most of the total amount.

The estimate of unobligated balances through 1983 was held level because of the uncertainty -- in any fiscal year -- of the timing of contracts and actual construction. This does not mean that the funds will not be used.

Question: You are requesting 2 projects for the Senator Wash Complex: construction of 2 comfort stations for $132,000; and $135,000 for connecting water, electrical and sewage systems. Why are these projects split between the Buildings and Recreation Construction activities?

Answer: The two comfort stations could have been programmed under either Building or Recreation Construction. Funding them in Building Construction provides a more balanced program than if all funding had been included under Recreation Construction.

Question: Last year, when $551,000 was requested for the project to construct the sewage treatment plant and water distribution system, the future costs were identified as $1,860,000. Now you show $1,180,000. Has the scope of the project changed? Are there other reasons for the reduction in future costs? Is the detailed design and cost estimate complete yet? How is the $135,000 project related to the funding provided in FY 1982? How much has been obligated, and for what purpose?

Answer: The scope of the Senator Wash project has changed in that the number of planned comfort stations has been reduced, and the type of sewage treatment system has been modified to more accurately reflect engineering knowledge gained about site conditions. Design and cost estimates are essentially complete.

The $135,000 is to provide the final connections between the water, sewage, and electrical systems and the comfort stations which will be completed in 1983 including lift station completion, pimup, hookup, electrical switching, etc.

Obligations to date total $119,000 for a contract to bring electrical power to the site.

Question: $325,000 is requested for constructing a water distribution system, 20 family units and 2 group camping units at Aguirrie Springs Recreation Area. Last year, for the same project, the total cost was estimated to be $348,000. What is the basis for the reduced estimate?

Answer: The lower estimate reflects modifications in the water distribution system. The type, size, and placement of the storage tank has been changed.

Question: You are requesting no funds for transportation construction in 1983. Are there no identified needs for roads, bridges or trails in 1982 or 1983 for the timber or recreation programs, or for multiple-use support?

Answer: There are some identified needs, but the states chose to hold them in abeyance pending further review. Planning to accommodate needs when they are identified must be accomplished before construction can occur. There are still too many unanswered questions about what is needed and where.

Question: How many construction projects in all 3 categories (buildings, recreation, and transportation) have been designed and are awaiting construction funding? If there are any, identify them for the record.

Answer: Besides the projects identified in the FY 1983 Budget Justification, there are a number of projects for which the survey and design has been completed. Next on our priority list are:

Buildings

Completion of Elko District Office Complex $.80 million

Recreation

Lower Colorado River - Parker Strip Recreation Complex .45

1.25 million

Other projects designed but not in priority order include:

Building	Recreation	Transportation
Henry Mountain Solar Heating	Red Rocks Solar	Whitebird Bridge (ID)
King Range Administrative Site		Devils Gate Bridge (NV)
Miles City District Office Phase III		Pacific Crest Trail (10 miles-CA)

Question: Your request for access is $1.5 million, a reduction of $0.2 million. Do you have a backlog of access requirements or requests? What will be the impact on the timber, range, and recreation programs of the proposed reduction? Is the level proposed adequate for these 1983 programs, as well as for multi-purpose use?

Answer: The easements now identified as being required for resource use and development will take years to acquire. More than 8,800 will ultimately be needed to reach an estimated 25 million acres of public land which lack a usable road system.

An estimated 500 million board feet of timber as well as other extensive resources are unavailable without extensive easement acquisition.

Th outputs of the timber program will not be reduced. One hundred ninety thousand fewer acres of forage will be accessible to BLM range managers, and 19,500 fewer acres of recreation land will be available to the public. Seventeen miles of multi-purpose roads located on non-Federal land will not be available to BLM or the public for access to the public lands.

The proposed budget is adequate for the 1983 program.

Question: For FY 1982, $295,000 was provided for BLM acquisition management. The request for this activity for FY 1983 is $307,000 an increase of $12,000. The justification (p. 208) shows an increase of $75,000 and 3 positions. The amount provided in 1982 for acquisition was $2,717,000. The 1983 request for acquisition is $161,000, a reduction of $2,556,000. The justification shows a reduction of $2,619.000. What accounts for the differences between the amounts shown for these programs in the Committee table in the Congressional Record of December 10, 1981 (p. H 9160) and the amounts shown in the budget justification?

Answer: The amounts in the Congressional Record are correct. The amounts shown in the justification are incorrect.

Question: If acquisitions are decreasing, why are 3 additional positions needed in FY 1983?

Answer: A total of 8 FTE's are proposed for management of the 1983 Land Acquisition program funded from the Land and Water Conservation Fund (LWCF). This includes 5 FTE's that was shifted from BLM's non-LWCF acquisiton program (primarily easement acquisitions) in 1982 and 3 additional positions in 1983.

The additional FTE's in 1983 are offset in the Land and Water Conservation fund. From 1982 to 1983, FTE's (shown in the related allocation accounts) will decrease from 36 to 0. (See page NPS-239, FY 1983 Budget Justifications for the National Park Service.)

Question: How much did you request to the Department for acquisition? What tracts would these funds have acquired?

Answer: BLM requested $468,000 from the Department to acquire two scenic easements on the Rogue Wild and Scenic River.

OREGON AND CALIFORNIA GRANT LANDS

Question: You are requesting a direct appropriation for the Oregon and California Grant Lands of $52.9 million. Why are the reforestation (30,920 acres) and stand improvement (28,500 acres) decreased from last year's base of 40,000 acres reforestation and 48,400 stand improvement?

Answer: The difference in reforestation and stand improvement accomplishments between FY 1982 and FY 1983 is the result of over-optimistic estimates in the FY 1982 justification that did not consider the impacts of the timber market slump upon reforestation acreage, and which assumed that the stand improvement portion of the Medford timber management plan would be implemented at a more rapid rate than what has occurred.

Question: You are requesting $2.4 million for other forest resources, an increase of $0.3 million. What is the status of the 3 wilderness study areas that were to be completed in 1983.

Answer: The statement on wilderness study areas in the FY 1982 justification is misleading in that no O&C funds have been planned or spent for wilderness inventory or study. The statement refers to the three instant study areas located on public lands in Western Oregon. Studies on these three areas totaling 880 acres were completed in 1980. BLM has recommended the areas as non-suitable for wilderness designation. The Bureau's recommendation is presently under review by the Secretary.

CADASTRAL SURVEY

Question: Last year, you indicated you were doing a study to determine the direction of the cadastral program. What was the outcome of that assessment?

Answer: The study of the cadastral survey program has not been conducted. Continuing review of cadastral survey needs, however, has reinforced the policy that surveys should be conducted only in direct support of resource program needs and management issues.

The BLM Budget Justifications for FY 1983 (page BLM-141) indicate the estimated acreage of surveys categorized by the program or management problem addressed. About 70% of the planned surveys will address issues of occupancy, or legal property descriptions, and boundary lines necessary for efficient energy leasing.

QUESTIONS SUBMITTED BY THE HONORABLE LES AUCOIN

COST OF VEGETATION MANAGEMENT

Question: Do you agree, as the GAO found, that a serious information gap exists relating to the total cost of vegetation management methods, their relative effectiveness and the long-term silvicultural and environmental impacts of herbicide use?

Answer: We agree that in the past total actual costs of various projects have not always been known. We do know the contract costs for the various types of projects. Although indirect costs for items such as administration and monitoring have not always been known, we have made efforts to correct the deficiency by including all costs charged to each project and initiating permanent recordkeeping. We feel we can now accurately predict the indirect costs of each method of vegetation management.

In most cases, information on the relative effectiveness of herbicides is available. The primary question is "how much can we rely on manual vegetation management, and how cost effective is this method compared to herbicides?"

In FY 1979, BLM completed an EIS for Western Oregon which examined the silvicultural and environmental impacts of the herbicide program. As a result of the analysis in the impact statement, methods were developed to mitigate long-term adverse impacts. We feel these measures have been successful and that there are no serious information gaps.

ALTERNATIVES TO HERBICIDES

Question: The same GAO report says experiences in forest management have demonstrated that alternatives to herbicides for site preparation and release work are viable but to what extent they can replace herbicides is unknown. Do you agree and if so, why is that the case?

Answer: We agree that alternatives are viable, and in fact BLM has been utilizing them after a site-by-site analysis to determine which method is most feasible. As indicated in the GAO Report, research is needed to evaluate new alternatives and the extent to which they can replace herbicide use.

Question: Do you agree with the GAO report that the degree to which alternatives can eventually be used to replace herbicides will not be known until more pretreatment and post-treatment site specific data is gathered and an analysis is made to determine why projects, both chemical and nonchemical, succeed or fail?

Answer: Yes, we agree, and we are conducting site-specific analyses.

Question: Is it true, as the GAO report claims, that none of the BLM districts have consistently gathered and documented site specific information on the various treatment alternatives? Why is that?

Answer: It is true that no formal documentation as is now being used, was used in the 1970's. This is not to imply that the area silviculturist did not survey the units prior to treatment and make his professional assessments of the sites. However, BLM relied on the work performed by universities and two experiment stations.

TREE RELEASE

Question: Is it true that no standard, objective criterion exists for deciding whether a stand of trees should be released or how they should be released? The GAO report says none exists. If there is one please elaborate for the record.

Answer: It is true there are no written standard criteria for release treatments. Due to the varied environmental factors involved in making these judgements such as different species, slope, and tree condition over a wide area, the Bureau must rely on the latest information gleened from the research of experts in the Forest Service and the state research stations. Professional judgement of existing and anticipated vegetative competition based on field surveys is the basis for the decision to release trees from vegetative competition.

Question: The GAO report contends that the BLM needs to increase its use of nonherbicide methods so that these options can be thoroughly evaluated. Are you planning to do so and if so how. If not, why not?

Answer: The Bureau has made a commitment to do so and has already initiated actions that have brought this about in an orderly manner. We have comparative trial projects underway in our Roseburg, Medford, and Coos Bay Districts.

Question: The GAO report concludes that the BLM does not make detailed cost comparisons nor keep records to track the indirect costs associated with the various vegetation management practices? Provide for the record the procedures you follow in this regard.

Answer: Since the time of the report, the Bureau has initiated procedures for recording charges to each project for monitoring, site review, and other charges. This data is maintained on a project-by-project basis.

AERIAL SPRAYING VERSUS MANUAL RELEASE

Question: Provide for the record the cost of aerial herbicide spraying versus manual release methods from 1975.

Answer: The information you requested is displayed below:

BLM Western Oregon Range of Average District Total Costs
Per Acre Manual Release vs. Herbicide Release

Fiscal Year	Manual	Aerial Herbicide
1975	---	$15.07 - $26.00
1976	$ 85.00 - $209.00	$12.65 - $26.00
1977	$131.49 - $133.91	$21.12 - $28.00
1978	$132.03 - $297.00	(Moratorium on spraying)
1979	$172.64 - $210.00	$35.00 - $65.00
1980	$ 35.44 - $220.00	$27.29 - $84.00
1981	$ 62.96*	$38.30 - $65.00

* Based on the one contract completed in FY 1981

Question: Do you agree that any efforts to evaluate and gain experience with differing methods to carry out site preparation and release work must be long term? If so, how many tests has the BLM started, or is planning to start, since the GAO report came out in April of last year?

Answer: We do agree that long-term efforts are needed. One long-term scientific test on BLM land is underway in the Coos Bay District in cooperation with the CRAFTS research project mentioned in the GAO Report. Research institutions are the best vehicle for conducting these long-term studies.

Question: There are substantial fixed costs with helicopter spraying. As more acreage is sprayed, the per acre cost is reduced. It would seem that there is a built-in incentive to spray as many acres as possible in a given contract. Would you agree that aerial spraying of herbicides has a built-in tendency towards spraying excessive acreage due to operating economies of scale?

Answer: There are operating economies of scale associated with any specific vegetation treatment method. However, with the review process we have, we do not feel there is a tendency to spray excessive acreage via helicopter solely because of economies of scale.

Question: Is it true that many times up to 25% of the acreage treated by herbicides spraying would not be necessary to treat because site specific certification of need would show there was not a need for that treatment?

Answer: Our recommendations do go through several levels of site-specific review and public scrutiny before an area is chosen for treatment by either manual methods or herbicide spraying. We do not believe that we are spraying unnecessary acreage.

Question: Do you agree with the GAO report when it concludes that reports of aerial spraying in the Siuslaw National Forest, in 1978 and 1979, that showed that some conifer damage existed, that about one half of the acreage would need retreatment or respraying, and that some of the areas sprayed did not need release?

Answer: We have not evaluated the Forest Service reports that were analyzed by GAO.

Question: Do you agree that as a result of heavy reliance on herbicides for release that nonchemical methods have not been widely used, evaluated or documented? Wouldn't it seem reasonable to conclude that more data needs to be obtained?

Answer: The Bureau has participated in a number of tests and research projects to obtain additional information on non-chemical methods. For example, the Bureau has been sponsoring research through Oregon State University and implementing trials with non-chemical methods in the Districts of Western Oregon. The major thrust of the overall effort is to develop cost-effective non-chemical vegetation control methods.

Question: Do you agree with the GAO's conclusion that a problem generally associated with manual methods is resprouting, and that uncertainty currently exists about whether the timing of the cutting may affect the amount of that resprouting, and that more studies are needed?

Answer: Resprouting is one of the major problems with manual methods of brush control. Timing of control methods is important in whatever method is used. Uncertainty does exist with some vegetation types and species. Although resprouting habits of many brush species are known, more study could be of value on those species on which little is known.

Question: It is my understanding that the Interior Department has required each BLM district in western Oregon to establish at least one trial site each year for testing of alternative methods. Has this been done and if so, where? Describe the nature of the tests.

Answer: Appendix V of the GAO Report contains a letter from the Department of the Interior stating that BLM Western Oregon Districts have been directed to establish at least one trial site annually for alternative method testing. This was a misunderstanding. Actually, each of the 25 western Oregon Resource Areas was encouraged to establish a trial nonherbicide project in 1981 only.

Other priorities have prevented implementation of many of these projects. We have recently requested current status reports on these projects which compare manual brush cutting and grass control by scalping and mulching with herbicide application.

Question: In March 1979, the Secretary of the Interior provided for the limited use of herbicides. I understand that the BLM Director mandated that ongoing efforts be increased to learn more about nonchemical methods of vegetation management through contract and experimental means. As a response, BLM has contributed to the work of the CRAFTS and FIR units for experimental studies. How has BLM used contracts to obtain more information? Provide the number and nature of such contracts.

Answer: In addition to contracting for formal research through CRAFTS and FIR, the Bureau has contracted for site preparation and release of conifers in each district for the purpose of gathering more information on costs and general effectiveness. We have issued at least five contracts for this purpose since 1981.

ENVIRONMENTAL IMPACTS OF SPRAYING

Question: Does the BLM take into account the negative externalities associated with aerial herbicide spraying? How are human and fisheries contamination, and damage to crops considered when the aerial method is evaluated for a specific site?

Answer: The EIS addresses environmental problems associated with spraying in general and provides general mitigation measures. In addition, a site-specific environmental assessment is prepared to determine the impacts on a particular area and to apply the mitigation measures developed in the EIS.

CONTRACT COSTS

Question: Would you agree that, because of mill closures and high rural unemployment, Oregon's labor markets have shrunken dramatically? Would you agree that with a larger pool of workers available the competition for well publicized manual release work would probably be intense? Would this increased pool of workers and intensified competition probably reduce manual contract costs?

Answer: Our experience this year has indicated that competition for work has reduced the cost of all types of contracted work including herbicide application.

VEGETATION SURVEYS

Question: Would you also agree that better vegetation management surveys, to determine areas of actual competing brush competition, coupled with a site specific approach to contracts should reduce, perhaps substantially, the acreage and brush that actually requires treatment? Wouldn't this, in turn, reduce the overall work force requirements for manual release projects?

Answer: We are currently conducting high quality surveys and are site specific in our actual herbicide applications. As a result, work force requirements would not be affected by changes in surveys.

Question: Would you agree that many of the herbicide experiments do not replicate actual methods of application? In fact, instead of aerial application by helicopter, is not many times, a backpack sprayer used and the chemicals applied directly on the foilage of the target species? I know of five studies showing that aerial spraying showed a higher percentage of resprouting and lower percentage of plant death from aerial application than was observed in backpack application. Can you comment on this?

Answer: The application of herbicide by a backpack sprayer is not competitive with, nor a substitute for, aerial application. The method used to apply herbicides is dependent on the objectives of the test. Backpack application is used when there is a need for greater control over both the application and the area to be sprayed. The deciding criterion is the method that best reduces the vegetative competition on a given area in the most cost-effective manner.

O&C RECEIPTS

Question: Mr. Director, I am sure you are aware of the serious economic problems in the Pacific Northwest. Unemployment in my state is one of the highest in the nation. The crisis is worst in those communities that revolve around the timber industry and, in particular, those communities and timber operations that are dependent upon Federal timber. Those counties, and in particular, the O&C Counties are at the brink of disaster.

Let me give you some numbers that I think illustrate what I am talking about. The unemployment rate for all 18 O&C Counties is over 14 percent. Counties that receive 83 percent of the receipts have a staggering 17 percent. Three of the counties have unemployment rates of over 20 percent. These figures are, of course, low because they do not take into account those people who no longer receive unemployment benefits or are discouraged or have simply left the State looking for opportunity elsewhere.

Receipts in FY 1982 are expected to fall off by 60% compared to FY 1981. The tax base in those 18 counties, as in the rest of Oregon, has been shattered by recession and unemployment. As the State and the counties grope for a way to make ends meet, what do you expect the effects of the drop in receipts in this fiscal year to be on those 18 Oregon Counties?

Answer: The drop in O&C receipts could cause a reduction in county services if counties do not find an alternative source of funds to replace the counties' share of O&C receipts.

Question: If an accompanying shift in how revenues were distributed to counties occurred, how do you think the tax base of the counties would be affected?

Answer: If a shift in revenue distribution resulted in less revenue to the counties and if county services were maintained at present levels, then other means to support those services would have to be found by the counties or the State of Oregon.

Question: Wouldn't you agree that the combination of a dramatic drop in receipts and a smaller percentage of the receipts could put a severe strain on the ability of the counties to provide basic services?

Answer: It depends largely upon how individual counties respond to reduced income from O&C receipts. Any dramatic drop in county revenue could put a strain on the counties to provide basic services, depending upon the options available to the counties.

Question: Would this add even more pressure on timber firms in these counties that, at this moment, are barely staying in business?

Answer: We do not know how the counties would respond or what impact this would have on timber firms.

Question: Might this lead to even higher levels of unemployment?

Answer: To the extent that employment in the county is tied to O&C receipts and there are no alternative revenue sources or economic opportunities, yes, more unemployment could result.

Geological Survey

Favorable Petroleum Geological Provinces—Alaska

AGENCY: Geological Survey, Interior.

ACTION: Notice of the procedures for classifying and designating certain lands in the State of Alaska as favorable petroleum geological provinces (FPGP's).

SUMMARY: Classification will be made by the Director, USGS, based on a technical evaluation of direct or indirect geologic evidence. Three areas are initially being designated as FPGP's pursuant to section 1008 of the Alaska National Interest Lands Conservation Act (ANILCA). They are: the Cook Inlet Tertiary Onshore Province, the Gulf of Alaska Tertiary Onshore Province, and the Cape Lisburne Province. The provinces designated initially are those in which exploratory drilling has resulted in the actual discovery of oil or gas. Other onshore provinces in Alaska not affected by this action will be designated as FPGP's if oil or gas is discovered therein, or whenever the Director of the U.S. Geological Survey (USGS) determines that oil and gas discoveries on lands within undesignated provinces are highly probable, after evaluating new geological, geophysical, and/or drilling data. This action is a preliminary step in the Department's planning process leading to the opening of applicable

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onshore Federal lands in the State of Alaska to oil and gas leasing pursuant to ection 1008 of ANILCA and does not epresent a decision to lease any particular lands.

Maps depicting the designated FPGP's are available from the USGS Regional Conservation Manager, Anchorage, Alaska.

FOR FURTHER INFORMATION CONTACT: Mr. Joe Jones, Regional Conservation Manager, 800 A Street, P.O. Box 259, Anchorage, Alaska 99510 (907-217-4463) or Mr. Larry P. Bauer, Branch of Fluid Minerals Management, Onshore Minerals Regulation, Conservation Division, U.S. Geological Survey, National Center, Mail Stop 650, Reston, Virginia 22092 (703-860-7535).

SUPPLEMENTARY INFORMATION:

Background Information

Under section 1008 of the ANILCA, the Secretary of the Interior is directed to establish an oil and gas leasing program for applicable Federal lands in the State of Alaska pursuant to the Mineral Leasing Act (MLA) of 1920, as modified by ANILCA. Excluded from this program are lands in the National Petroleum Reserve—Alaska (NPR–A) and lands being studied under sections 1001 and 1002 of ANILCA. On March 12, 1981, the Secretary announced his intentions to move expeditiously in implementing this program and has directed that a schedule be developed which will permit competitive and/or noncompetitive leasing within the next 2 years.

The process set forth in section 1008 is under way. Expressions of interest have been requested and analyzed; applications are being accepted for conducting geophysical surveys, consultation has been initiated and will continue, and the available geological and geophysical data, including oil and gas studies, have been evaluated. Based on a Bureau of Land Management call for expressions of interest and the public response to that notice, the Department has determined that sufficient interest has been indicated in exploring areas for oil and gas under section 1008(c) of ANILCA.

This determination of interest begins the leasing process and the designation of FPGP's is the next step in the Department's overall planning process under section 1008(c) for making available areas for leasing. This Notice sets forth the criteria and procedures used to classify lands in the State of Alaska and designates three provinces initially.

Criteria and Procedures

Criteria: While the FPGP nomenclature is new, the prupose of the FPGP classification is similar to that of the Known Geologic Structures (KGS's) classification under the Mineral Leasing Act, i.e., the purpose of these classifications is to identify which lands are to be leased competitively. However, the criteria to be applied in making these two classification actions are different. The KGS classification applies to the immediate structure of a known producing or producible oil and gas field. The FPGP classification applies to a total province encompassing many possible specific structures or traps, and does not necessarily require the past or present existence of a producing or producible well.

Designations will be made on the basis of direct or indirect evidence. Direct evidence is the actual discovery of oil and gas. In classifying lands on the basis of indirect evidence, the Director of USGS must be convinced, based on a technical evaluation of available geologic, geophysical, and/or drilling data that there is a high probability that oil or gas will be discovered within the province.

Procedures: The Director of the USGS shall be responsible for classifying and designating lands as favorable petroleum geologic province. Designation shall be effected through publication of a Notice in the Federal Register.

The designations set forth in this Notice serve as initial designations. Whenever an oil and/or gas discovery is made hereafter within an undesignated province or available data indicate a high probability for such a discovery in that province and the appropriate classification action taken. Newly available geological and geophysical data, as well as the information contributed by unsuccessful oil and gas tests, will be evaluated periodically to ensure timely classification actions on the basis of indirect evidence.

Classification and Designation

For the purposes of section 1008 of ANILCA, the Geological Survey has divided the onshore sedimentary basins in Alaska into 14 provinces.

They are:

Alaska Peninsula Province
Bristol Basin Onshore Province
Brooks Range Province
Cape Lisburne Province[1]
Cook Inlet Onshore Mesozoic Province
Cook Inlet Onshore Tertiary Province[1]
Copper River Basin Province
Gulf of Alaska Onshore Tertiary Province[1]
Hope Basin Onshore Province
Interior Lowlands Province
Kodak Island Province
Southeastern Alaska Province
Yukon-Koyukuk Basins Province
Yukon-Porcupine Basins Province

The division of the onshore areas in Alaska into the above provinces is a judgment that was made on the basis of currently available geologic and geophysical data and in light of the purposes of section 1008 of ANILCA. The provinces delineated for the purposes of section 1008 differ, however, from provinces used by the USGS for resources assessment purposes because the objectives and purposes of classification and assessment are not synonymous, i.e., identification of areas, specifically Federal lands, subject to competitive leasing as opposed to estimating the overall oil and gas resources potential of a particular region. The list of provinces subject to designation as FPFG's may be revised or the boundaries of established provinces adjusted as new information becomes available.

In assessing each of the provinces identified above as to whether they should be designated as FPGP's at this time, the available geologic, geophysical, and drilling data, as well as the exploration history of each province, were evaluated separately. Indirect evidence developed through prior studies and other available indirect evidence were evaluated. The Director concluded, based on a geologic evaluation, that there is a less than high probability for the discovery of oil and gas in those provinces where actual discoveries have not been made. Until more conclusive evidence is developed, we are limiting the initial designations to those areas in which actual discoveries have been made. Discoveries have been made in three provinces. They are: Cape Lisburne Province, Cook Inlet Tertiary Onshore Province, and the Gulf of Alaska Tertiary Onshore Province. The Cook Inlet Onshore Tertiary Province contains 2 oil fields and 12 gas fields. This province also extends offshore where drilling has resulted in the discovery of 5 oil fields and 3 gas fields. The Gulf of Alaska Onshore Tertiary Province includes the Katalla field which is the site of Alaska's first oil production. The field produced 154,000 barrels of iol from 1902 until 1933, when the wells were shut in. Other wells drilled within this province have had oil shows. The Cape Lisburne Province is that portion of the North Slope west of the National Petroleum Reserve—Alaska. The eastward extension of this Province contains the giant Prudhoe Bay oil field, the Kuparuk oil field, the Barrow gas fields, and an oil field at Umiat.

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[1] Provinces herein designated as FPGP's.

Based on the foregoing, the following provinces are hereby designated as favorable petroleum geological provinces:

Cape Lisburne Province
Cook Inlet Tertiary Onshore Province
Gulf of Alaska Tertiary Onshore Province

Maps identifying these areas are available from the USGS Regional Conservation Manager in Anchorage, Alaska. A description of the lands included in these specific areas is on file in that office.

Additional designations will be made as a result of new discoveries or if an analysis of new data indicates that exploration of the province has a high probability for discovery.

This action is being taken as part of the Department's overall planning process for opening applicable Federal lands in the State of Alaska for oil or gas leasing and does not represent a decision to lease any particular lands, whether or not designated in this notice. Separate announcements will be issued subsequently by the Bureau of Land Management inviting applications for the leasing of applicable Federal lands. Prior to that action, additional consultation will be effected with applicable groups as identified in section 1008 of ANILCA.

Dated: November 30, 1981.

Dallas L. Peck,

Director.

[FR Doc. [illegible] Filed 12-3-81; 8:45 am]

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2. There are three timing changes:

   -- RS-2 has been delayed a month, from June to July 1982,

   -- Sale 73--Central and Northern California has been delayed eight months, from January to September 1983 which slows the pace of leasing there, and

   -- Sale 91, Central and Northern California, has been delayed six months, from March to September 1985.

Finally, refinements have been made in the streamlining proposals included in the July proposal. An important component of the proposed program was studying the possible offering for lease all tracts within a planning area. We have refined this concept by deciding to focus the environmental impact analysis on those portions of a planning area which the U.S. Geological Survey (GS), the Minerals Management Service (MMS), energy firms and others believe have potential for production of oil and gas. Under this refinement, the planning process will work as follows:

- The 5-year program will set out entire planning areas for consideration.

- The sale process will begin with issuance of the Call for Information. The entire planning area will be open for consideration at this point, and the Call will request information about the entire area. The Call will identify the portions of the planning area which GS and MMS believe have potential for discovery of commercial deposits of oil and gas.

- In response to the Call for Information, industry, States and other parties may suggest further areas of potential interest within or beyond those identified by GS and MMS. At the time of the Call, States, and others will also have an opportunity to comment on areas or topics of concern which should be considered in the planning for the lease sale. In regard to this last point, States and others will continue to have the same opportunity to comment on environmental, ocean use, or other areas of interest or concern as they have had in the past.

- Using the responses to the Call and other available data, the Under Secretary will approve the areas of hydrocarbon potential to be proposed for leasing and analyzed in the sale-specific EIS as the proposed Federal action. This approval will represent the Area Identification step listed on the Leasing Schedule.

- The analysis in the EIS will focus on the potential environmental effects of oil and gas activities in the area proposed for leasing. The EIS will, as in the past, analyze alternatives to the proposed action. The EIS will also include an environmental description of the entire planning area in order to provide the best available information for decision-making.

- The proposed Notice of Sale will include the area defined at the Area Identification step and studied in the EIS subject to appropriate consultation and consideration with the States as called for by the National Environmental Policy Act and the OCS Lands Act.

This refinement is intended to facilitate the important role played by the States in planning for OCS leasing, while keeping entire planning areas open for consideration and permitting the market to determine lease offerings. We would like to emphasize that the tentative proposed final program includes the same opportunities for consultation and comment as have been in place for a number of years.

The tentative proposed final program also includes changes in the way we will assure receipt of fair market value for OCS leases. The major change from the current system will be deferring completion of the Department's fair market value determination until after the sale to avoid the inefficiency of evaluating tracts which do not receive bids. The new system will place more reliance on competition in the lease market and include a three-phase screening process as is discussed in Enclosure 3.

We want to point out that the budget and personnel figures shown in Enclosure 4 are estimates. While they represent a very careful effort to project the resources needed to carry out the tentative proposed final program, they have not been evaluated through either internal or Office of Management and Budget processes and are subject to refinement, especially during the annual budget preparation and appropriation process. The estimates for pre-sale planning decrease over time because they do not include pre-sale planning costs for sales beyond June 1987, not because they reflect a policy judgment that the intensity or number of pre-sale activities will be modified in the latter years of the program.

The program we are proposing is consistent with the National Energy Policy Plan submitted to the Congress by the Department of Energy in July 1981. In reference to Federal Lands, the plan states, "The Federal role in National energy production is to bring these resources into the market place, while simultaneously protecting the environment." The tentative proposed final 5-year OCS oil and gas leasing program is an essential component of this Federal role. The fundamental purpose of the OCS program, as viewed in the context of national energy policy, is to discover, identify, and inventory those oil and gas resources that lie beneath the ocean within Federal jurisdiction, and to allow for their timely and efficient development.

IN REPLY REFER TO:
3331 (543)

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
WASHINGTON, D.C. 20240

September 21, 1979

Instruction Memorandum 79 - 730
Expires 9/30/80

To: Managers, OCS Offices

From: Assistant Director, Energy and Mineral Resources

Subject: Use of Environmental Studies Ranking Criteria

INTRODUCTION

The recently submitted FY 1980-1981 Regional Studies Plans used the criteria system developed by the Director's Ad-Hoc Committee to rank studies proposed for funding in FY 1980. During the recent justification of the FY 1979 Supplemental Appropriation, BLM's use of that ranking system was evaluated by the Office of Management and Budget (OMB). As a result of that analysis, OMB suggested that BLM revise its method of using the criteria. The Branch of Environmental Studies analyzed OMB's suggestion and determined that the results OMB desired could be achieved by reallocating the points assigned to each criterion. During a briefing on the use of the criteria to rank FY 1980 studies, the Director stated that the OMB system should be used by the OCS offices and the Branch of Offshore Studies for ranking studies in the forthcoming FY 1981-1982 Regional Studies Plans. This memorandum discusses the OMB system and provides guidance on the use of the various criteria.

METHOD

The OMB ranking system uses the same five criteria developed by the Director's Ad-Hoc Committee. However, the OMB system relies upon a matrix hierarchy based upon criteria A (Mandate for Study) and B (Timing and Content Need for Information) rather than the total number of points accumulated for all five criteria. Under the OMB system, total points awarded under criteria C,D, and E are used to rank studies within each of the classes defined by the different combinations of criteria A and B. The following classes of studies rankings are possible using the revised criteria:

Class #1 - A1B1 - study information is essential, study cannot be deferred until the next budget period;
Class #2 - A2B1 - study information is critical, study cannot be deferred until the next budget period;
Class #3 - A1B2 - study information is essential, study could be deferred but with significant risk that it would not be completed for use in immediate decisions;
Class #4 - A2B2 - study information is critical, study could be deferred but with significant risk that it would not be completed for use in immediate decisions;

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Class #5 - A3B1 - study information is useful, study cannot be deferred until the next budget period;
Class #6 - A3B2 - study information is useful, study could be deferred but with significant risk that it would not be completed for use in immediate decisions;
Class #7 - A1B3 - study information is essential, study could be deferred until next budget period and still be completed in time for forthcoming decisions;
Class #8 - A2B3 - study information is critical, study could be deferred until next budget period and still be completed in time for forthcoming decisions;
Class #9 - A3B3 - study information is useful, study could be deferred until next budget period and still be completed in time for forthcoming decisions;
Class #10 - A4B1 - study information would contribute to data base, study cannot be deferred until next budget period;
Class #11 - A4B2 - study information would contribute to data base, study could be deferred but with significant risk that it would not be completed for use in immediate decisions;
Class #12 - A4B3 - study information would contribute to data base, study could be deferred and still be completed in time for forthcoming decisions.

In this system all A1B1 (Class #1) studies have priority over all other study classes regardless of their total points from criteria C, D, and E. Second priority goes to A2B1 (Class #2) studies. This hierarchy continues to A4B3 (Class #12) studies.

Criteria C, D, and E are to be used to rank proposed studies within each of the AB classes. Criteria C and D are to be used as they were in ranking FY 1980 studies. Note that criterion C has been divided into four elements to provide greater resolution of this issue than was possible with the previous wording.

Past use of criterion E has eliminated the value of this criterion as a distinguishing agent. Therefore, the use of criterion E shall be altered from past use to the following:

1) All proposed studies shall be ranked in relation to the intensity of regional concern expressed on their behalf.
2) The list shall then be divided into four groups of equal or nearly equal numbers of proposed studies. No quartile shall contain more than one additional study in excess of the number in any of the other three quartiles.
3) Priority points will be assigned to studies within each of these four classes in the following manner:

E1 - First Quartile (Strongest Concern) - 50 points
E2 - Second Quartile - 35 points
E3 - Third Quartile - 20 points
E4 - Fourth Quartile - 5 points

All studies ranked within a quartile shall receive the points assigned to that quartile.

An example of the use of this ranking system is summarized in the following discussion. An OCS field office provides the following priority assessment for a proposed study:

Criterion A - study information is critical but not mandated by legal or institutional actions - A2;
Criterion B - study could be deferred but with significant risk that it would not be completed for use in immediate decisions - B2;
Criterion C - data from the proposed study would be applicable to immediately adjoining OCS regions - 5 points;
Criterion D - study is required to fill information gap in existing data - 7 points;
Criterion E - study apprears in the second quartile of regional concern - 35 points;

Based upon this assessment, this study is a Class #4 (A2B2) study with 47 priority points.

RESPONSIBILITIES

The OCS offices have the primary responsibility for ranking proposed studies and for developing a coherent and concise rationale for each proposed study. The principal difference between this exercise and the recently completed FY 1980-1981 Regional Studies Plans is that the OCS offices will provide their candidate studies ranked by major class (A1B1, A2B1, etc.) and then ranked within each class by the total scores assigned under criteria C, D, and E. The rationale for a priority assignment for each criterion (A, B, C, D, and E) must be provided in writing to the Branch of Offshore Studies.

The Branch of Offshore Studies has the primary reponsibility for assessing the adequacy of the documentation provided by the OCS field offices in support of the proposed studies. If the Branch determines that a particular study's rationale is insufficient, it will notify the appropriate field office and request additional written justification. The Branch of Offshore Studies also has the responsibility to assess the programmatic priority of each proposed study and to notify any OCS office of proposed changes in a study's rank based upon programmatic considerations. Finally, the Branch of Offshore Studies is responsible for development of the National Studies Plan and for supporting its presentation to OMB and other interested parties.

GUIDANCE ON THE SELECTION OF APPROPRIATE CRITERIA

Based upon its review of the FY 1989-1981 Regional Studies Plans and the use of the criteria for ranking studies, the Branch of Offshore Studies (1) suggested to the Director that the OMB system be adopted; (2) revised the existing criteria, and (3) developed the following statements to further clarify appropriate use of the criteria. A copy of the revised criteria is enclosed with this memorandum. The following comments are provided to promote consistent use of the criteria by the sponsoring offices.

Criterion	Discussion
A1	In order to qualify for points under this criterion, the sponsoring office must demonstrate the existence of the court order, statute, or directive and the formal implementation of any of these mandates in a manner which directs the proposed study.
A1b	Although the NEPA and the OCS Lands Act and its Amendments generally justify the existence of the Environmental Studies Program, they do not justify specific studies. The statutes and directives which do apply include, but are not limited to, the Marine Mammal Protection Act, Endangered Species Act, Water Pollution Control Act, Clean Air Act, Marine Sanctuaries Act, and Coral Management Secretarial Order. To qualify for points under this category, the specific statute or directive requiring the study and how its provisions direct the subject study must be clearly demonstrated. To qualify under the Endangered Species Act, a consultation letter must have specified the study need and be referenced in the justification. Anticipation of receipt of a directive does not qualify a study under this criterion.
A2	This criterion has been divided into two parts. The first part addresses the issue of importance of information to the decisionmaking process, and the second part addresses the issue of anticipation of court orders and settlements based upon experiences in other OCS regions. In order to qualify as critical, the sponsoring office must demonstrate that information from the proposed study is the principal basis for preparing the target decision, and that the target decision would have to be made with significant uncertainty if the proposed study was not completed.

Criterion	Discussion
	The sponsoring office must also demonstrate that the information provided by the proposed study could not be assembled from existing data.
	In order to qualify in anticipation of legal action or settlement, the OCS region must be environmentally or socioeconomically "similar" to the area of previous settlement of litigation. For example, a platform monitoring study required by a court of law for Cook Inlet would qualify as a precedent study only in a similarly restricted body of water. The sponsoring office is also responsible for demonstrating "similarity" and reasonable logic in the extension of the previous settlement to the area of the proposed study.
A3	In order to qualify for ranking under this criterion, the sponsoring office must demonstrate that the information from the proposed study is useful for making specific decisions. The sponsoring office must demonstrate that the information would reduce decisionmaker uncertainty. However, information from the study need not be the basis for the decision but rather refines or adds to existing knowledge. The decision could be made with minimal uncertainty if this study was not completed.
B1	In order that a study qualify under this criterion, the sponsoring office must demonstrate that the proposed study cannot be deferred until the next budget period. The impact of deferral must be clearly stated in terms of BLM's ability to make the target decision without information from the proposed study. Information in this discussion should then be clearly supported in the subsequent procurement plan.
B2	In order that a study qualify under this criterion, the sponsoring office must demonstrate that the "risk" involved in deferring the study is significant in terms of eliminating essential or important information from the decisionmaking process.
C	The purpose of this criterion is to promote those studies whose techniques or information are expected to save BLM time or money, or permit greater resolution in future studies. Consequently, only the first OCS study employing a specific new methodology or technology can claim priority points based on this justification. Ten

Criterion	Discussion
	OCS regions are recognized for the purposes of this criterion: North Atlantic; Middle Atlantic; South Atlantic/Blake Plateau; Eastern Gulf of Mexico; Central and Western Gulf of Mexico (one region); Southern California; Central and Northern California (one region); Gulf of Alaska, Kodiak, and Cook Inlet (one region); Bering Sea; and the Chukchi and Beaufort Seas (one region). The office sponsoring a proposed study must clearly demonstrate the applicability of the study's results, technology, or methodology to other OCS areas.
D1	This criterion is designed to encourage analysis of existing data and its relevancy to a given issue as required by the Blue Book process, rather than possibly funding an effort which may acquire duplicative data. Information to fill data gaps identified in this initial analysis is supplied through subsequent studies. To qualify for maximum points, field office justification must indicate that thorough review of existing information and its relevancy to the decision process justified a literature review synthesis effort.
E	The purpose of the revision to this criterion is to increase its discriminatory capacity. The production of four quartiles is a highly subjective procedure but does require the sponsoring office to exercise some judgement rather than simply ranking all of its proposed studies in the highest possible category.

Donald P Truesdell
Acting

1-Enclosure:
Encl. 1 - Criteria for Ranking Studies in the FY 1981-1982 Regional Studies Plans

Attachment 3-6

CRITERIA FOR RANKING STUDIES IN THE FY 1981-1982 REGIONAL STUDIES PLANS

CRITERION A
MANDATE FOR CONDUCTING STUDY

1. Study information is essential for a specific leasing, lease management, or program management decision, because study is:
    a. ordered by a court to support a sale-or program-specific decision; or
    b. explicitly required by existing Federal or State statute, or by Agency Directive.
2. Study would provide critical information for a specific leasing or lease management decision involving environmental risk or impact or a specific program management decision; or a similar study is required by previous agreement for settlement of litigation in a similar OCS region.
3. Study would provide useful information for a specific leasing or lease management decision involving environmental risk or impact or a specific program management decision.
4. Study information would not affect a specific leasing or lease management decision involving environmental risk or impact or on a specific program management decision. However, it could contribute to improved leasing, lease management, or program management decisions through enhancement and/or refinement of the quality of the data base.

CRITERION B
TIMING AND CONTENT FOR INFORMATION

1. Study must be initiated in the budget period at issue:
    a. in order to be completed in time for use in a specific leasing, lease management, or program management decision;
    b. because study is a necessary prerequisite for another study to support a leasing, lease management, or program management decision; or
    c. because study is a continuation or logical subsequent to an ongoing study to support a leasing, lease management, or program management decision.
2. Study can be deferred until the next budget period. However, such deferral creates significant risk that study cannot be completed in time for use in immediate leasing, lease management, or program management decisions.

3. Study can be deferred until the next budget period and still be completed in time for use in forthcoming leasing, lease management, or program management decisions.

CRITERION C
APPLICABILITY OF STUDY RESULTS, METHODOLOGY, OR TECHNOLOGY

1. Study results, methodology, or technology are applicable to all other OCS regions. (15)

2. Study results, methodology, or technology are applicable to most (6 or more) other OCS regions. (10)

3. Study results, methodology, or technology are applicable to adjacent OCS region or regions. (5)

4. Study results, methodology, or technology are specific to the OCS region in which the study is planned. (0)

CRITERION D
PRESENT AVAILABILITY AND COMPLETENESS OR INFORMATION

1. Information is already available in existing literature and/or data files; study consists of literature review and synthesis (compilation and analysis). (10)

2. Study is required to fill information gap in existing data. (7)

3. Study has been identified but no relevant information is presently available. (5)

CRITERION E
APPLICABILITY OF STUDY TO ISSUES OF REGIONAL OF PROGRAMMATIC CONCERN

Each office proposing studies for funding shall rank all of the proposed studies in order of decreasing regional or programmatic concern. The sponsoring office will then divide that list into four equal or nearly equal groups of studies with following priority point assignments:

Quartile #1 - Studies of Strongest Concern (50)
Quartile #2 - (35)
Quartile #3 - (20)
Quartile #4 - Studies of Least Concern (5)

No quartile shall contain more than one additional study in excess of the number in any of the other three quartiles.

TUESDAY, APRIL 27, 1982.

UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST SERVICE

WITNESSES

JOHN B. CROWELL, ASSISTANT SECRETARY, U.S. DEPARTMENT OF AGRICULTURE

R. MAX PETERSON, CHIEF, FOREST SERVICE

DOUGLAS R. LEISZ, ASSOCIATE CHIEF, FOREST SERVICE

J. LAMAR BEASLEY, DEPUTY CHIEF, PROGRAMS AND LEGISLATION, FOREST SERVICE

ROBERT E. BUCKMAN, DEPUTY CHIEF, RESEARCH, FOREST SERVICE

F. BRYAN CLARK, ASSOCIATE DEPUTY CHIEF, RESEARCH, FOREST SERVICE

JOHN H. OHMAN, DEPUTY CHIEF, STATE AND PRIVATE FORESTRY, FOREST SERVICE

RAYMOND M. HOUSLEY, DEPUTY CHIEF, NATIONAL FOREST SYSTEM, FOREST SYSTEM

JEROME A. MILES, DEPUTY CHIEF, ADMINISTRATION, FOREST SERVICE

WILLIAM L. RICE, DIRECTOR, PROGRAM DEVELOPMENT AND BUDGET, FOREST SERVICE

LEON H. ANDERSON, DIRECTOR, HUMAN RESOURCES PROGRAMS, FOREST SERVICE

DENNIS KAPLAN, CHIEF, BUDGET CONTROL AND ANALYSIS DIVISION, U.S. DEPARTMENT OF AGRICULTURE

MR. SHERMAN, BUDGET OFFICE, U.S. DEPARTMENT OF AGRICULTURE

OPENING REMARKS

Mr. YATES. Good morning. The hearing will come to order. This is the hearing on appropriations for fiscal year 1983 for the Forest Service. Appearing in support of that appropriation is Assistant Secretary Crowell; Mr. Peterson, Chief of the Forest Service; Mr. Leisz; Mr. Beasley; Mr. Buckman; Mr. Clark; Mr. Ohman; Mr. Housley; Mr. Miles; Mr. Rice; Mr. Anderson; and Mr. Kaplan.

Mr. SHERMAN. Mr. Chairman, I am Mr. Sherman from the Department's Budget Office. Mr. Kaplan was called for a medical emergency this morning. He will be joining the group as soon as he can arrive.

Mr. YATES. I take it that they don't think you are important enough to put at the table. You don't have anything to do with the budget?

Mr. SHERMAN. Yes, sir.

Mr. YATES. Is it that you are bashful or what?

Mr. SHERMAN. No, sir; that is not the case.

Mr. YATES. Shouldn't you be up here?

Mr. SHERMAN. If you wish, sir.

Mr. YATES. Well, we will proceed. The biographies of Mr. Crowell, Mr. Kaplin, and Mr. Clark may be placed in the record at this point. The biographies may be followed by the statements of Mr. Crowell and Mr. Peterson.

[The biographical sketches of Mr. Crowell, Mr. Kaplan, and Mr. Clark and the statements of Mr. Crowell and Mr. Peterson follow:]

BIOGRAPHICAL SKETCH

JOHN B. CROWELL, JR.
Assistant Secretary of Agriculture for
Natural Resources and Environment

John B. Crowell, Jr., was sworn in as Assistant Secretary of Agriculture for Natural Resources and Environment on May 20, 1981, the day of his confirmation by the United States Senate. His responsibilities include general supervision of the Forest Service and the Soil Conservation Service. He advises Secretary of Agriculture John Block and the administration of President Ronald Reagan on policy matters concerning the program areas of these agencies.

Mr. Crowell came to the Department of Agriculture from a legal career in the natural resources field, serving since 1972 as General Counsel to the Louisiana-Pacific Corporation. From 1959 to 1972 he was an attorney with the Georgia-Pacific Corporation. In both positions he resided in Portland, Oregon.

From 1957 to 1959, Mr. Crowell was Law Clerk to a U.S. Court of Appeals Judge for the Third Circuit. He has an L.L.B. from Harvard Law School and an A.B. from Dartmouth College.

He served in the Navy from 1952 to 1954 as a Commissioned Officer on a Pacific fleet ammunition ship. His interests include fishing, gardening, and field birding. He served 12 years as a volunteer regional editor for *American Birds*. He is married and has two sons and a daughter.

JOHN B. CROWELL, JR.

Title:	General Counsel	1973-Pres.
Company	Louisiana-Pacific Corporation	
Career:	Law Clerk to Honorable Gerald McLaughlin, U.S. Court of Appeals, Third Circuit Newark, New Jersey	1957-1959
	Attorney Georgia-Pacific Corporation Portland, Oregon	1959-1972
Memberships:	American, Oregon & Multnomah County Bar Associations Director, National Forest Products Association, Washington, D. C. Secretary-Treasurer-Public Timber Purchasers Group, Portland, Oregon	
Military Duty:	United States Navy, Commissioned Officer, USS Mount Katmai (AE-16)	1952-1954
Education:	Thomas Jefferson High School Elizabeth, New Jersey	
	Dartmouth College Hanover, New Hampshire A.B. - History	1948-1952
	Harvard Law School Cambridge, Massachusetts L.L.B.	1954-1957
Birthplace:	Elizabeth, New Jersey	
Date of Birth:	March 18, 1930	
Parents:	Reverend and Mrs. John B. Crowell Elizabeth, New Jersey	
Wife:	Margaret "Peggy" McCue Crowell	
Children:	John Peter, Patrick Edlo, Ann Margaret Lake Oswego, Oregon	
Recreation:	Field birding, fishing, gardening	

BIOGRAPHICAL SKETCH--DENNIS KAPLAN

Dennis Kaplan is currently Chief of the Budget Control and Analysis Division in the Office of Budget and Program Analysis.

Mr. Kaplan first joined the Department of Agriculture in 1969 as a budget analyst with the Agricultural Research Service. Since then he has served as a budget analyst for a number of USDA programs in the Office of Budget and Program Analysis and its predecessor organizations.

Mr. Kaplan is a native of New York City. He received his Bachelor of Science degree from the University of Maryland in 1969 and his Master of Science degree in Public Administration from the George Washington University in 1975.

BIOGRAPHY

Dr. F. Bryan Clark
Associate Deputy Chief for Research
Forest Service, U.S. Department of Agriculture
Washington, D.C.

Bachelor of Science in Forestry, Purdue, University, June 1949
Master of Science in Forestry, University of Missouri, June 1954
Ph.D. in Botany, Southern Illinois University, June 1968

Member of Society of American Foresters
Chairman, Forest Sciences Board, Society of American Foresters
Member of American Forestry Association
Member of National Forestry and Science Honorary Societies
Member of Commission on Ecology, International Union for Conservation of Nature and Natural Resources
Formerly Adjunct Professor at University of Missouri and Southern Illinois University
Member of Walnut Council

Past experience includes brief employment by a large forestry industry in the western United States. Started work for the USDA Forest Service in 1949 as a research scientist. Has held various research and research administrative positions in Missouri, Kentucky, Indiana, Illinois, Minnesota, Pennsylvania and Washington, D.C. Was Director of the Northeastern Forest Experiment Station, Broomall, Pennsylvania, from 1974 to 1979. Expertise is in hardwood silviculture/ecology. Has done research and published on black walnut, yellow poplar, oaks, endotrophic mycorrhiza, soil site relations and coal stripmine reclamation.

The present position is to provide administrative leadership to comprehensive, scientific programs of domestic and foreign research. Has general responsibility for research in products utilization, engineering, forest survey, economics, international forestry, fire and atmospheric sciences, and energy programs.

STATEMENT OF
JOHN B. CROWELL, JR., ASSISTANT SECRETARY
FOR NATURAL RESOURCES AND ENVIRONMENT
U.S. DEPARTMENT OF AGRICULTURE

Before the Subcommittee on Interior
Committee on Appropriations
United States House of Representatives

APRIL 27, 1982

MR. CHAIRMAN AND MEMBERS OF THE COMMITTEE:

I welcome the opportunity to appear before you today to discuss the FY 1983 budget for the Forest Service. I am accompanied by R. Max Peterson, Chief of the Forest Service.

In the Budget Message submitted to the Congress on February 8, the President reasserted his firm resolve and adherence to the four policy fundamentals of his economic recovery plan:

- Reduced personal and business tax rates to stimulate saving, investment, work effort, and productivity.
- Firm control over all Federal spending, borrowing, and credit demand.
- Decreased Federal regulatory burden where the Federal Government has intruded excessively and unnecessarily.
- In cooperation with the independent Federal Reserve Board, control of the money supply designed first to reduce and then to prevent inflation.

During 1981, the Administration worked with the Congress to take major steps toward implementing this program:

- Congress passed the Economic Recovery Tax Act, the largest tax cut in history for businesses and individuals.
- In the Omnibus Budget Reconciliation Act, Congress reformed programs, so as to reduce otherwise anticipated outlays for them by $130 billion over the 1982-84 period.

The 1983 Budget will continue to diminish the rate of growth of Federal spending and to shrink the Government's share of the GNP.

The FY 1983 programs of the Forest Service, are proposed for $2,132 million, a 9 percent increase or $181 million above the level appropriated for FY 1982. About $1,494 million is being requested as annual appropriations. Another $638 million in proposed expenditures is being financed by permanent appropriations, trust funds and other sources. The funding of permanent appropriations and trust funds activities is derived generally by applying a portion of the revenues generated from the sale of forest products. Major examples are (1) Knutson-Vandenberg funds for reforestation, (2) brush disposal funds for disposal of excess logging debris, and (3) payments to States. Payments to States are estimated to be $342 million, which is an increase of about $100 million over FY 1982 due to a projected increase in receipts from sale of products and services generated through Forest Service programs.

The requested increase, plus some important shifts in funding among program areas, will significantly raise the level of benefits to the American people and will provide for sounder and more efficient management of our natural resources. These benefits range from economic goods like wood, oil, gas, and mineral products to such intangibles as the improvement of wildlife habitat. We are endeavoring to improve the return on the public investment represented by the National Forests. To do so requires expenditure of funds which will be returned at a substantial increase over several years following their expenditure.

I would like to outline some of this Administration's priorities which have shaped this budget.

We have emphasized programs which enhance the economic strength of the United States and which generate receipts to the Federal Government. The National Forest System is a tremendous asset which can contribute directly to economic well being. National Forests contain over 50 percent of the Nation's present standing softwood sawtimber supply and an estimated 25 percent of the potential domestic energy resources of oil, gas, coal, and geothermal steam. There are also important deposits of such strategic minerals as cobalt, tantalum, molybdenum, and the platinum group metals. In FY 1982, receipts to the U.S. Treasury generated by the Forest Service timber and minerals programs (which are the dominant elements of Forest Service receipts) are expected to be $1,248 million, growing to $1,893 million in FY 1983.

We have emphasized increasing user fees for activities that are now being provided free or below cost. Where possible, the cost of providing goods and services should be borne by the people who actually receive the benefits rather than the taxpayers as a whole. Examples are increased fees for recreational use and government publications. Increasing user fees also reduces the problem of the Government directly competing with the private sector.

We have emphasized increased efficiency. The Forest Service is strongly endeavoring to increase productivity. To do this, economic analysis is playing a greater role in the National Forests' planning process by carefully examining benefit/costs and tradeoffs among alternatives. In many program areas we are striving to maintain or increase resource outputs not by increased funding but by reducing the costs involved. We will accomplish this by emphasizing the compatibility among resource uses such as timber, recreation, wildlife, and range. We will also make some very specific management improvements such as holding road costs to the absolute mimimum necessary for the intended use. Deferment of work into the future and cost savings are estimated to be $50 to $60 million in FY 1982 with additional cost reductions in Forest Service programs expected in FY 1983.

We have maintained a strong commitment to conservation principles. Resources on National Forest System lands will continue to be used wisely to meet public needs. It is a basic principle that the productivity of the land will be protected in all Forest Service programs. We are also placing greater emphasis on the compatibility among resource uses such as timber, recreation, fish, and wildlife. For example, land management activities will fully integrate fish and wildlife needs with other resources and provide for or mitigate effects on habitat requirements. We are also dedicated to the principle that there must be a careful consideration of the environmental, economic, and social impacts of Forest Service resource management activities, as part of the planning and decisionmaking process.

I would like to show how these priorities were applied to some selected Forest Service programs.

Timber

The FY 1983 budget request provides for timber offerings of 12.3 billion board feet (bbf). This represents a substantial increase over the 11.0 bbf we expect to accomplish with the funding available from the FY 1982 Appropriation Act, and it is comparable to the 12.2 bbf that was offered for sale in FY 1981.

Here are some of the reasons why we need to begin increasing timber sales:

° The housing industry has been depressed since 1978 due to high mortgage interest rates. During this same period, a large portion of the children born during the post war baby boom have reached the age when they would normally enter the housing market. This has created an enormous pent-up demand for housing, the largest market for timber products. National Forests contain about 50 percent of the Nation's inventory of softwood sawtimber. In past housing booms, rapidly increasing lumber prices have contributed to inflation and have hindered industry in its efforts to meet consumer demand for affordable housing. We are determined to improve the supply of raw materials and ameliorate such pressures in the future by allowing adequate lead time to prepare and offer volumes necessary to meet the anticipated demand. An instantaneous response is not possible. We also have proposed several changes to timber sales contract procedures and have directed the scheduling of more short-term sales to dampen bidding at levels that reduce the market responsiveness of National Forest timber.

° The timber industry, a major employer in several States and many communities, has been hard hit by the current slump in housing. For many firms it is critical to have at least a 3-year supply of timber under contract and the reasonable expectation of continued access to National Forest timber, both to assure protection of existing large investments in existing processing facilities and to encourage new investment in more efficient manufacturing technology. Much of the National Forest timber currently under contract to purchasers cannot be harvested and manufactured by them for a profit in today's market. For example, at today's lumber and plywood prices it appears that about 60 percent of the 16.5 billion board feet currently under contract to purchasers in the Pacific Northwest is not economically marketable. An extension of most existing timber sales contracts was announced in October. While this will help prevent economic disruption within the industry for the short term future, it is also necessary that substantial volumes be newly offered in order to provide the raw material inventories necessary to bring stability to the industry and to assure ample supplies of wood to users when the housing economy strengthens.

° It is important to increase the revenue produced by the National Forests both now and in the future. In FY 1982, timber receipts including trust funds are expected to be $1,063 million and will rise to $1,666 million in FY 1983 as the recovery continues. Significant additional harvests are not only possible, they are necessary for good management in those National Forests which have large inventories of old-growth softwood sawtimber. The amount of increase will be determined by the land management plans now being prepared. We are presently losing unacceptably large volumes to mortality and disease. After harvest of the old-growth, we can dramatically increase the net annual growth on those forests. The use of intensive management measures and genetically improved trees offers the prospect of continued high harvest levels for the indefinite future.

The budget proposes a total of $875 million for the timber sales program, reforestation and timber stand improvement--a 14 percent increase over FY 1982. About $298 million of these funds are for roads. In addition to preparing for increased future sales, the budget recognizes the immediate need to reforest areas where disasters have killed timber stands by emphasizing reforestation rather than timber stand improvement. We are continuing on the congressionally mandated track to eliminate the economically feasible portion of the reforestation backlog by 1985.

In addition to increasing the funding for timber-related programs, we are, as I have said, making a concerted effort to reduce costs. Road construction and reconstruction projects are being carefully reviewed to keep costs down to the minimum necessary for the anticipated use of the road. Careful and coordinated management of existing roads, in some cases, can maintain them in useable condition. In other cases we will, from considerations of cost, be closing roads during certain periods or restricting their use. In addition, we can, in some places, reduce road costs associated with timber sales by concentrating timber sales in already roaded areas.

Minerals

Although the Secretary of the Interior issues leases for oil, gas, and certain mineral exploration and development on those lands in the National Forest System which were originally set aside from the public domain as forest reserves, the Secretary traditionally acts only on recommendations made to him by the Forest Service. In response to the intensified interest in exploration and development on the National Forests for oil, gas and minerals resulting from the Nation's need for energy-related resources, the FY 1983 budget request for minerals of $25.0 million is a 35 percent increase above the amount appropriated for FY 1982. The FY 1982 appropriation was a 22 percent increase above the FY 1981 level. Special emphasis is being given to coal, petroleum, natural gas, geothermal energy, and to strategic minerals. The expanded program is necessary to keep up with the increase in the number and complexity of lease applications, operating plans and mineral claims. Receipts from oil and gas and mineral leases on the National Forest lands which were once public domain are collected by the Department of the Interior and so are not debited to the Forest Service, but in 1982, $185 million in receipts to the Federal Government are expected to be generated from oil and gas and mineral activity on the National Forests. In 1983, receipts are anticipated to be $227 million. Clearly the returns are high and extremely cost effective from the costs incurred by the Forest Service of the leasing activities which generate these receipts.

As with the timber program, we are proposing to increase outputs by cutting costs as well as by increasing funding. In the past, we have found that only a small portion--about 2 percent--of the oil and gas leases on the National Forests are ever drilled and fewer still are ever developed. However, we have conducted environmental assessments on all areas before recommending conditions to which leasing will be subject. In the near future, we and the Department of the Interior will begin incorporating on a pilot test basis "contingent right stipulations" into leases on the National Forest System other than wilderness areas. Under the contingent right stipulation concept, the lease would contain an added stipulation that the right to explore or develop is contingent on Forest Service approval of an acceptable operating plan. The concept will be tested in selected areas excluding designated wildernesses and criteria for using contingent right stipulations will be identified. Under this program, the bulk of the environmental analysis would be shifted to the operational stage. Broad land management concerns and well-defined critical issues would be identified and addressed in lease stipulations. Further detailed analyses would occur when and if the lease holder decides to operate the lease by drilling or digging. At that time, an environmental assessment will be conducted, and if necessary, an environmental impact statement prepared. A recommendation will then be made to the Department of the Interior that the mineral activities proceed with whatever safeguards are appropriate for the surface environment or, if appropriate, that no exploration or development be permitted. This should decrease the cost to the Forest Service of processing leases and also should expedite the service provided to the extraction industry without, in any way, jeopardizing environmental safeguards.

Recreation

The Administration's budget and legislative proposals for FY 1983 contain two initiatives dealing with the recreational use of the National Forests.

The $97.9 million requested represents an 11 percent increase in funding over the amount appropriated for FY 1982. This more than compensates for the effects of inflation. It will offset some of the services that were formerly provided by the Youth Conservation Corps and Young Adult Conservation Corps. This will help the Forest Service cope with the growing use of the National Forests for outdoor recreation.

Research

The FY 1983 budget for Forest Research of $98 million is 11 percent below the amount appropriated for FY 1982. We will still be funding the largest Forestry Research program in the world targeted to some serious problems. For example, our research on acid precipitation will double over the FY 1982 level. The Forest Service will give emphasis to maintaining ongoing research on timber management and genetics, forest products and engineering, forest economics and inventory, protection of forest and rangelands from serious insect and disease problems, and protection from fire. Lower priority research will be delayed or terminated. The Forest Service is also participating in a joint study with the Agriculture research agencies and OMB to determine if some types of research would be better left to private industry and to help identify priority areas for future work.

State and Private Forestry

The FY 1983 budget for State and Private Forestry of $47.5 million is 25 percent less than the amount appropriated for FY 1982. It is also important to note that, while not displayed in the Forest Service budget, private landowners have been given major economic incentives to engage in forest management by Public Law 96-451 which provides for tax credits and depreciation of reforestation costs. In addition, the Economic Recovery Tax Act of 1981 reduces income and inheritance taxes which would provide additional incentives for private forest landowners.

In Forest Pest Management, the Administration's policy is that priority would be given to protecting Federal lands from major outbreaks of pests that do serious economic damage. Our goal is to phase out funding contributions to continuing large scale cost-sharing suppression programs that are aimed at chronic pests and do not involve Federal land. In the case of State and private lands, there is less justification for a direct Federal financial role. Thus, cost-sharing for suppression must be focused primarly on outbreaks where Federal and other lands are intermingled or where Federal assistance is required to ensure that sound pest management approaches are utilized. The Administration's FY 1983 budget will continue this direction in sorting out State and Federal roles. The Department of Agriculture will continue its efforts in research, methods development, and technical assistance to help States deal with forest insect and disease pests.

Rural Fire Protection has actually been increased slightly above the FY 1982 appropriation level. This will permit small additional grants to States for performing analyses to determine the economic efficiency of fire protection programs.

The Forest Service will continue to provide a $3 million annual grant to the State of Minnesota for intensive timber management of State and private lands to help offset timber impacts associated with the enlargement of the Boundary Waters Canoe Area Wilderness in 1983. This promised assistance for fiscal years 1980 through 1990 was part of the Federal commitment involved in passage of that legislation.

Additional Changes Required

In order to carry out the programs which are included in this budget, it will be necessary for the Forest Service further to increase efficiency. This will involve the consolidating or phasing out of certain work units, particularly in the Research program. In addition, there may be a need to look at the combination of Region, Station, and Area offices. The Appropriation Committees in the past have included language in the administrative provisions of the Appropriations Act which precluded the expediture of funds to change the boundaries of any region, or to move or close any regional office for Research, State and Private Forestry, and the National Forest System without the consent of the concerned congressional committees. We are specifically requesting the Appropriation Committees to eliminate this language. We will then be able objectively to consider boundary changes and consolidation of units which could reduce cost and increase efficiency. We, of course, will advise the concerned committ before effecting any change.

I have touched on the programs where the Reagan Administration's new priorities are most evident. After Chief Peterson provides an overview of the budget, we would be happy to address any questions that the Committee may have.

STATEMEMENT OF R. MAX PETERSON, CHIEF
UNITED STATES DEPARTMENT OF AGRICULTURE, FOREST SERVICE
BEFORE THE HOUSE OF REPRESENTATIVES
APPROPRIATIONS SUBCOMMITTEE
INTERIOR AND RELATED AGENCIES
April 27, 1982

Mr. Chairman and Members of the Committee--

I want to thank you for the opportunity of appearing before you today to discuss the Forest Service's 1983 budget. Before getting into a visual display of the budget proposals for 1983, I would like to review the accomplishments of 1981.

1981 Accomplishments

There were many accomplishments in 1981. A total of 236 million recreation visitor-days were recorded on the National Forests in 1981, an increase of two million over 1980. Forty percent (40%) of all recreation visitor-days on Federal land occur on National Forests. The number of mineral leases and permits processed in 1981 was an all-time high -- 25,061: this was 17 percent more than 1980 and 30 percent more than our funded target for 1981. This program returned $125 million to the Treasury in 1981.

We exceeded our timber sale offered target of 11.9 billion board feet by 200 million board feet. This includes 1.1 billion board feet under the salvage sales program. We also met or exceeded targets for fuels management, reforestation and stand improvement, trail construction, range improvements, wildlife habitat improvement, land line location, landowners assisted through the State and Private Forestry programs, and most of our targets in human resource programs. Due to the decline in timber harvest, road construction and reconstruction by timber purchasers was about nine percent less than planned -- 8,709 miles rather than 9,535 miles. We had no other significant shortfalls. A detailed review of the 1981 targets and accomplishments is included in the Fiscal Year 1981 Report of the Forest Service.

1983 Budget

I have brought some charts to provide additional detail and a brief overview of the 1983 budget. With your agreement, I will present this visual display at this time.

I appreciate this opportunity to discuss the 1983 budget with you. I will be glad to answer any questions you might have.

Forest Service

Major Considerations

- Long term demand/supply situation
- Housing starts
- Mineral exploration and development
- Emphasize management of the National Forests
- Greater reliance on state and local governments and the private sector
- Increased receipts to the federal government
- Increased Forest Service efficiency

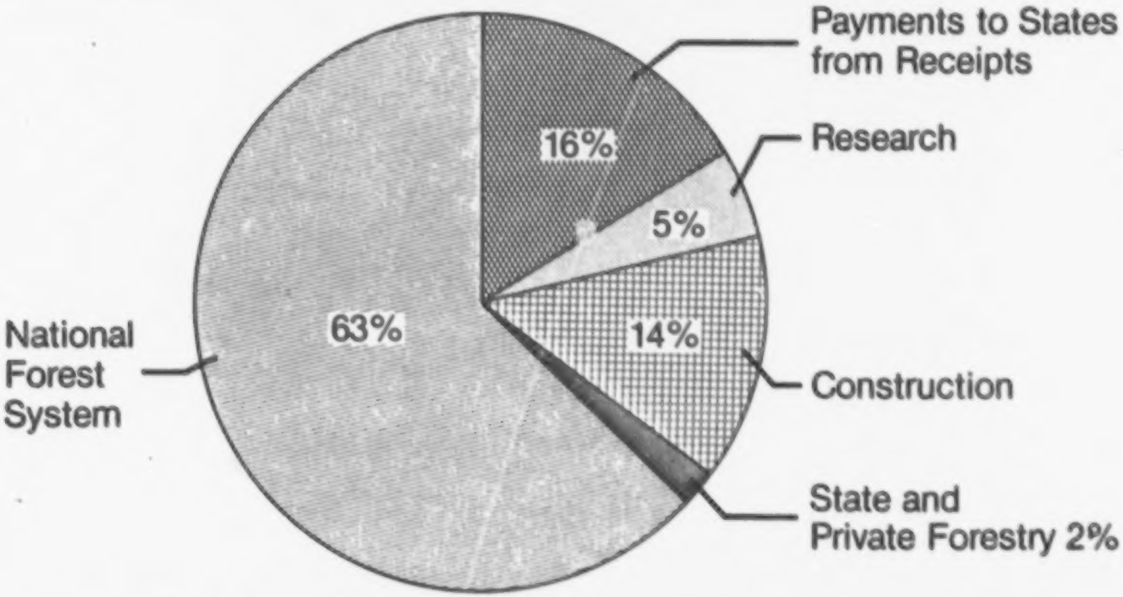
Forest Service

Summary Comparison
($ Millions)

	1982	1983 (Change)	
Regular Appropriated	$1,429	$1,494	(+65)
Permanent Appropriated:			
Working Funds	135	150	(+15)
Payments to States	242	342	(+100)
Trust Funds	145	147	(+2)
Total	$1,950	$2,132	(+182)
Work Years (FTE)	44,136	42,385	(-1,751)
Receipts	$1,503	$2,060	(+557)

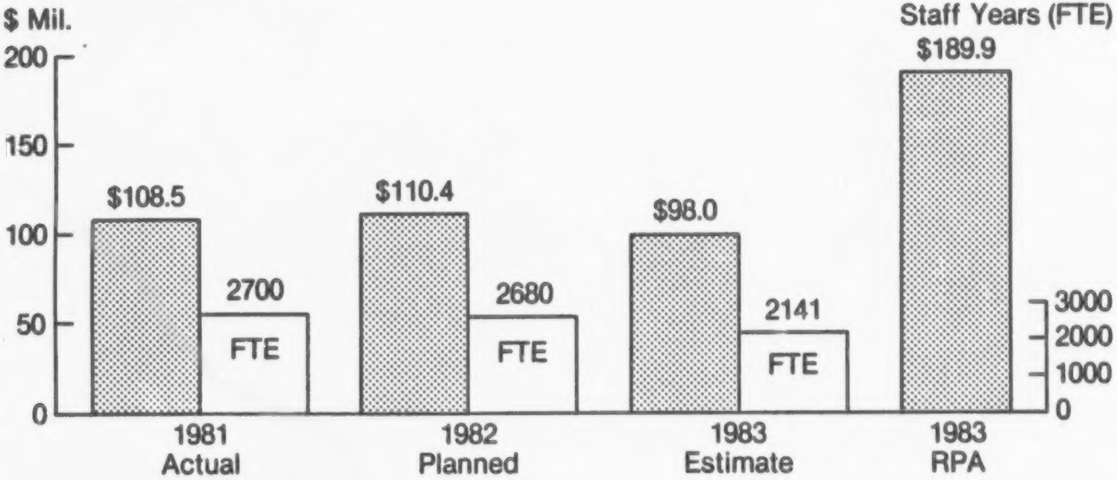
Forest Service

Distribution of 1983 President's Budget



Forest Service

Research

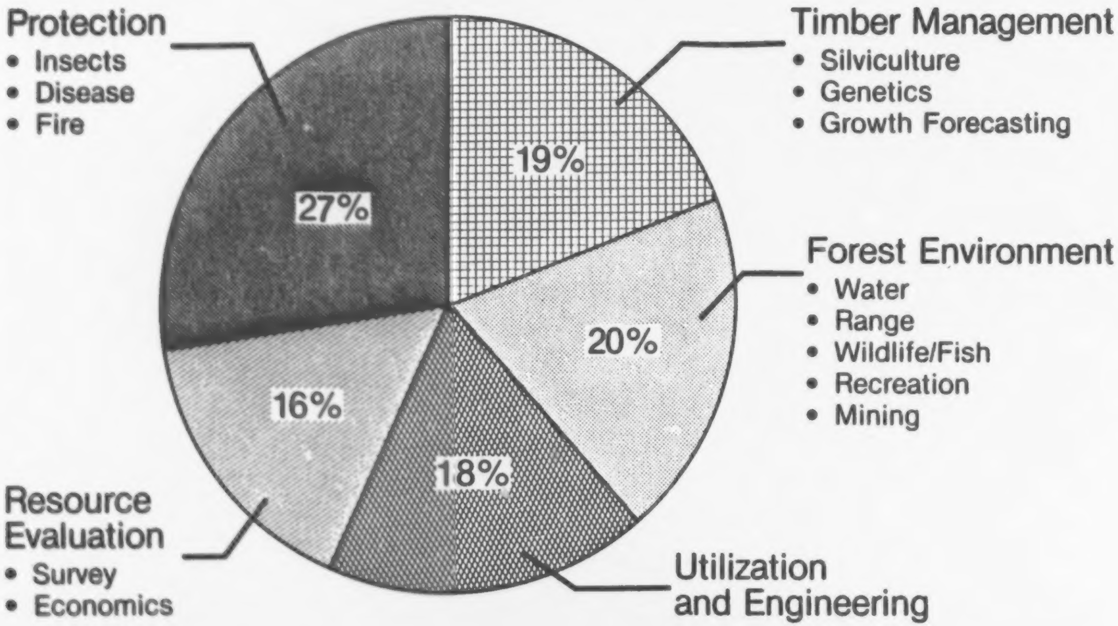


1983 Program Emphasis:

- Timber management and genetics
- Protection of resources
- Acid rain
- Range, recreation and watershed management
- Forest products and engineering
- Forest economics and inventory

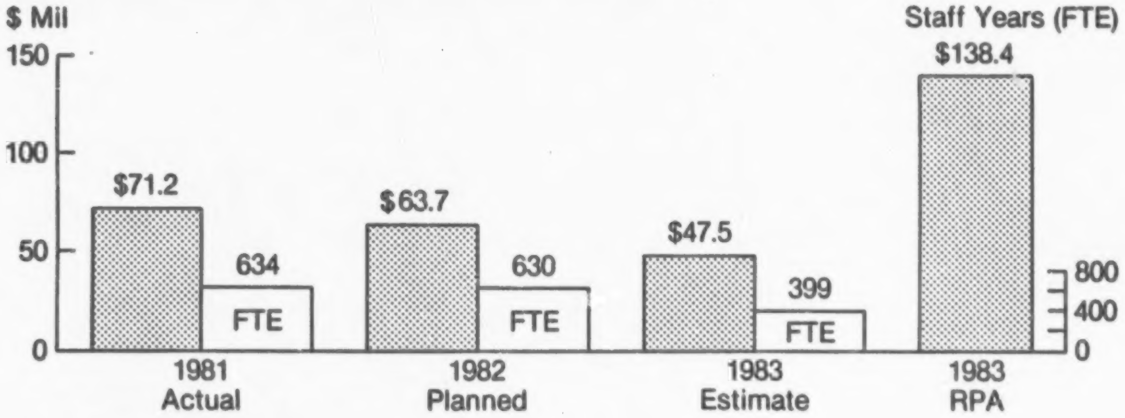
Forest Service

Research Program FY 1983



Forest Service

State and Private Forestry



1983 Program Emphasis:

- Rural fire protection and control
- Forest pest management on federal lands
- Planning assistance to states where softwood supplies can be increased and state resource plans will be completed
- Boundary waters canoe area

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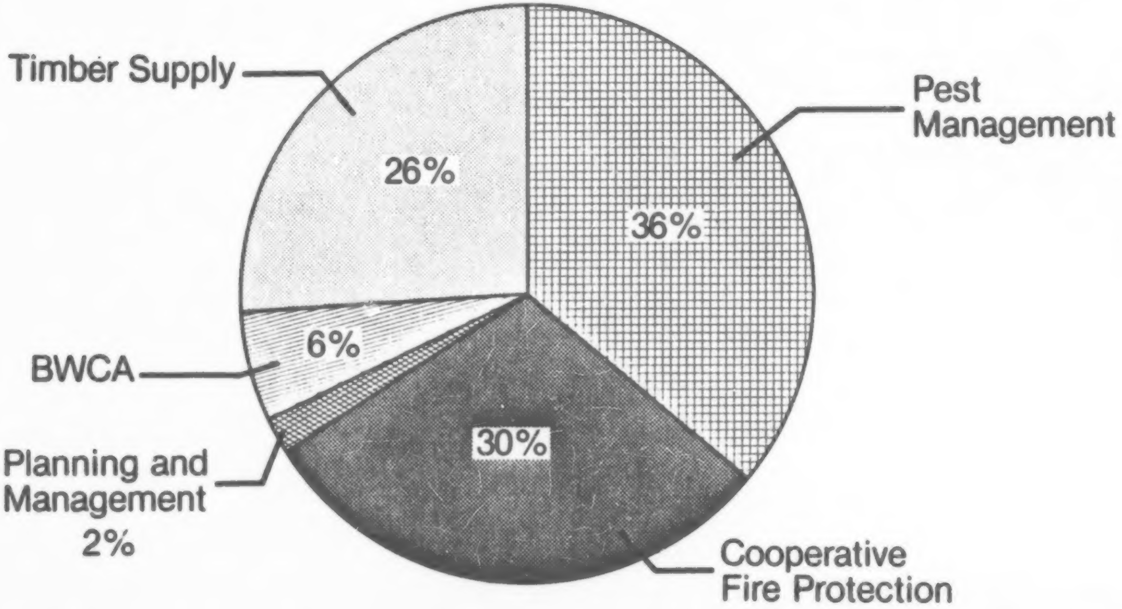
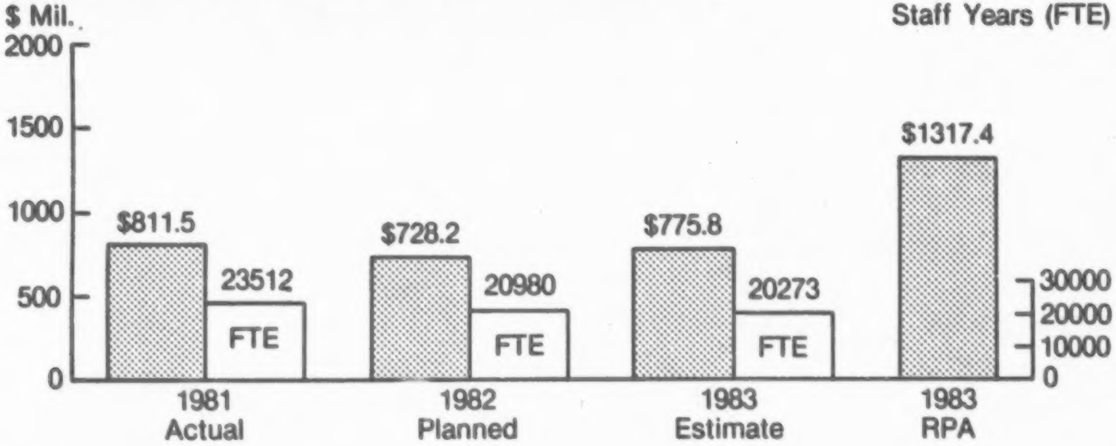
Forest Service

State and Private Forestry FY 1983



Forest Service

National Forest System
(Excluding General Administration)

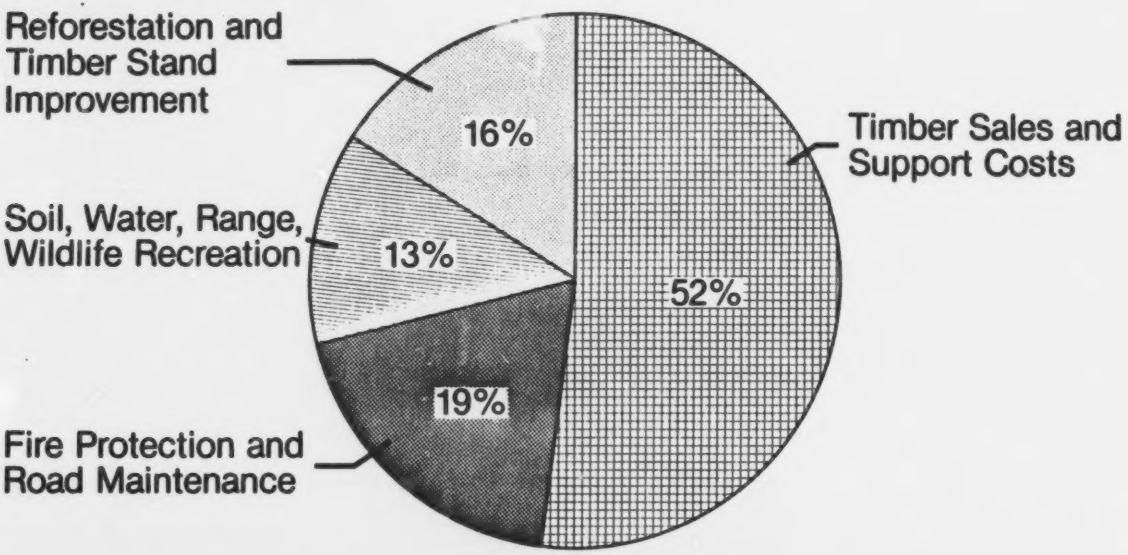


1983 Program Emphasis:

- Timber sale offerings
- Oil, gas and mineral leases and claims
- Timber and mineral support
- Reforestation and the backlog
- Recreation management

Forest Service

National Forest System FY 1983 (Excluding GA)



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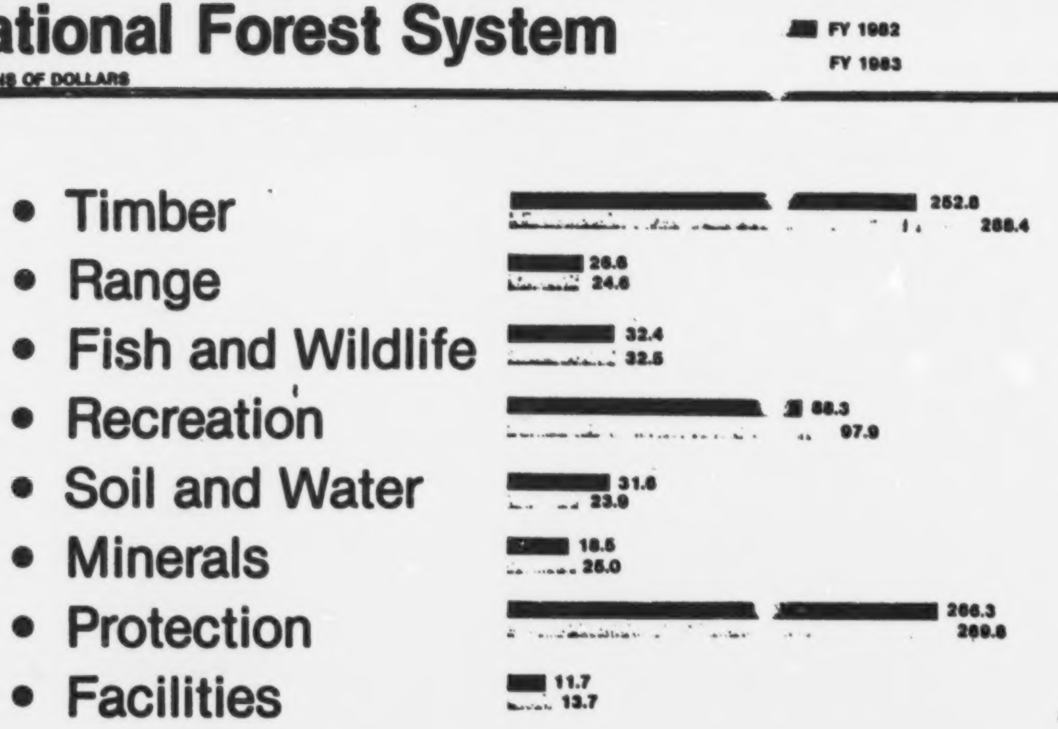
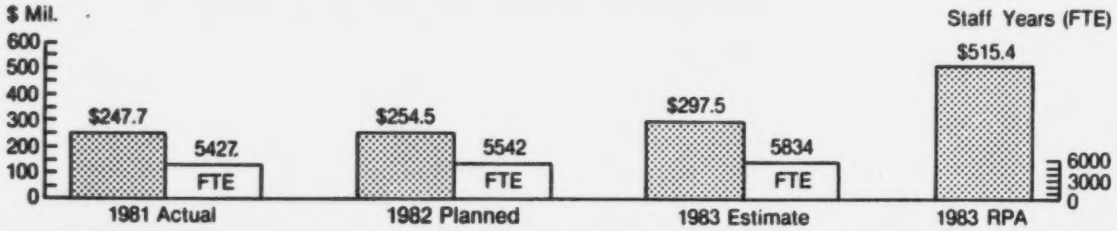
National Forest System

MILLIONS OF DOLLARS



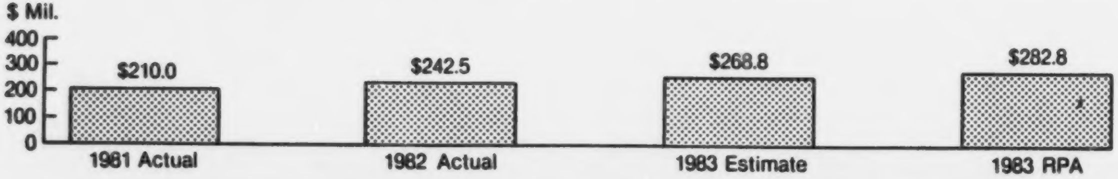
Forest Service

Construction
(Excluding Timber Purchaser Credits)



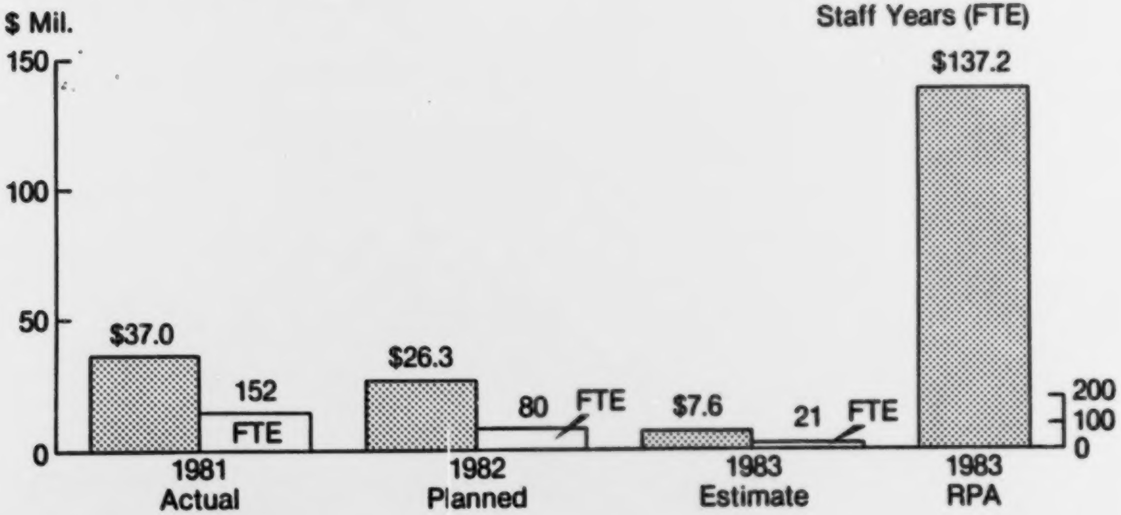
1983 Program Emphasis:
- Timber sale access
- Critical support facilities, particularly health and safety hazards

Timber Purchaser Credits



Forest Service

Land Acquisition



1983 Program Emphasis:
- Closing existing LWCF cases
- Provide for pending court deficiency awards

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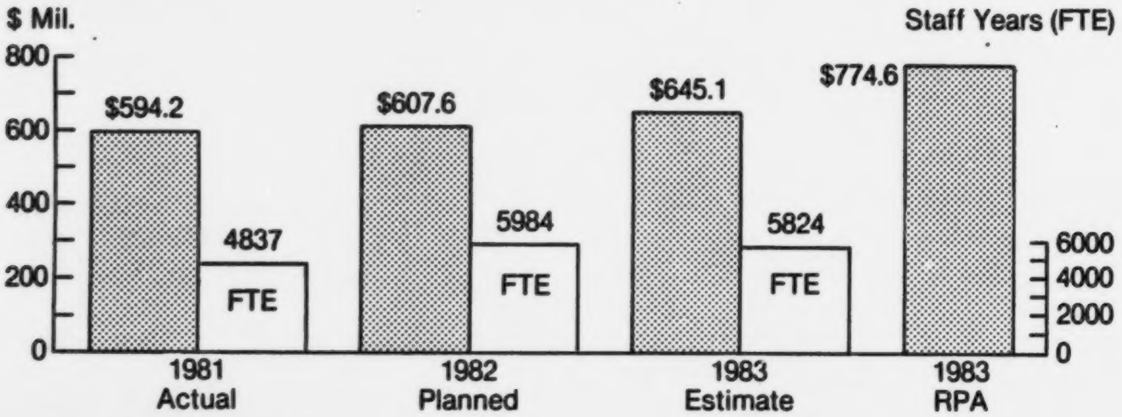
Forest Service

Permanent, Trust Funds and Other



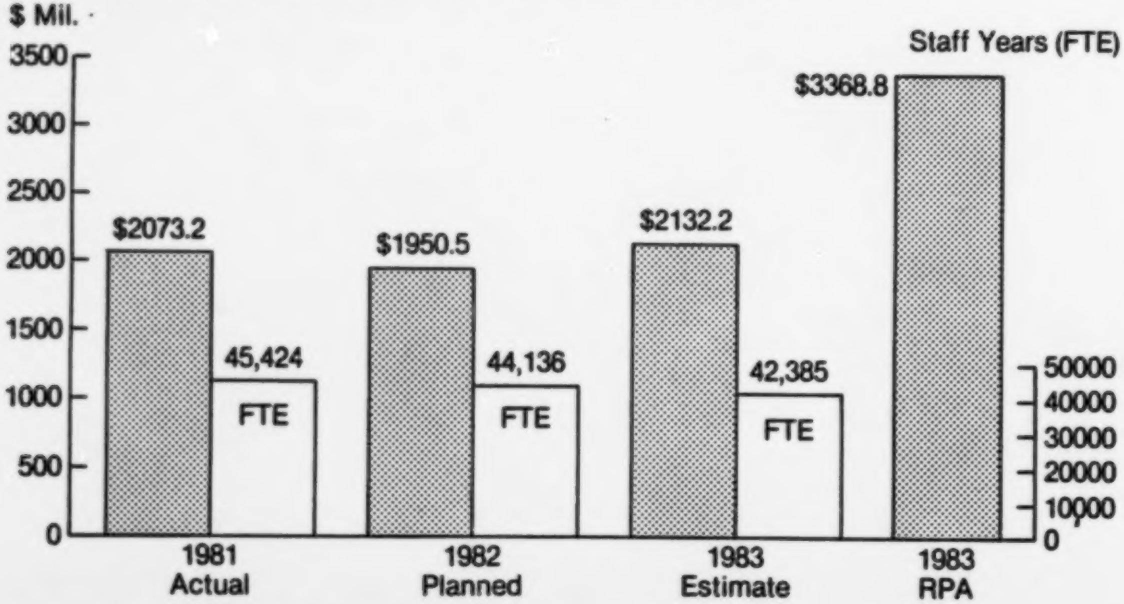
1983 Program Emphasis:

- Brush disposal related to timber sales
- Timber purchaser roads constructed by the forest service
- Tongass timber supply fund
- Payments to states from receipts
- KV reforestation and timber stand improvement

Forest Service

Total

(Excluding Timber Purchaser Credits)



Mr. YATES. And with that, we ask Mr. Crowell to tell us how the work is going on in the Forest Service.

FOREST SERVICE FISCAL YEAR 1983 BUDGET SUMMARY

Mr. CROWELL. Mr. Chairman, I am pleased to be here this morning to discuss the 1983 budget for the Forest Service. I will summarize my statement.

The fiscal year 1983 programs of the Forest Service are proposed for $2.132 billion, a 9-percent increase or $191 million above the level appropriated for fiscal year 1982. About $1.494 billion is being requested as annual appropriations. Another $638 million in proposed expenditures is being financed by permanent appropriations, trust funds, and other sources.

The requested increase, plus some important shifts in funding among program areas, will significantly raise the level of benefits to the American people. It will also provide for more sound and efficient management of our national resources.

These benefits range from economic goods like wood, oil, gas, and mineral products to such intangibles as the improvement of wildlife habitat.

We are endeavoring to improve the return on the public investment represented by the National Forests. To do so requires expenditure of funds which will be returned at an increase over several years following their expenditure.

I would like to outline some of this Administration's priorities which have shaped this budget. We have emphasized programs which enhance the economic strength of the United States and which generate receipts to the Federal Government. The National Forest System is a tremendous asset which can contribute directly to economic well-being.

National Forests contain over 50 percent of the Nation's present standing softwood sawtimber supply and an estimated 25 percent of the potential domestic energy resources of oil, gas, coal and geothermal steam.

There are also important deposits of strategic minerals.

In fiscal year 1982, receipts to the U.S. Treasury generated by the Forest Service Timber and Minerals programs, which are the dominant elements of Forest Service receipts, are expected to be $1.248 billion, growing to $1.893 billion in fiscal year 1983.

INCREASE OF USER FEES

We have emphasized increasing user fees for activities that are now being provided free or below cost. Where possible, the cost of providing goods and services should be borne by the people who actually receive the benefits, rather than by the taxpayers as a whole.

Examples are increased fees for recreational use and Government publications. Increasing user fees also reduces the problem of the Government directly competing with the private sector.

We have emphasized increased efficiency. The Forest Service is strongly endeavoring to increase productivity. To do this, economic analysis is playing a greater role in the National Forests' planning process by carefully examining benefit costs and trade-offs among alternatives.

We will also make some very specific management improvements such as holding road costs to the absolute minimum necessary for the intended use.

We have maintained a strong commitment to conservation principles. Resources on the National Forest System lands will continue to be used wisely to meet public need.

It is a basic principle that the productivity of the land will be protected in all Forest Service programs. We are also dedicated to the principle that there must be a careful consideration of the environmental, economic and social impacts of Forest Service resource management activities as part of the planning and decisionmaking process.

I would like to show how these priorities were applied to some selected Forest Service programs.

TIMBER

For timber, the fiscal year 1983 budget request provides offerings of 12.3 billion board feet. This represents a substantial increase over the 11 billion board feet we expect to accomplish with the funding available from the fiscal year 1982 Appropriation Act and it is comparable to the 12.2 billion board feet that was offered for sale in fiscal year 1981.

My statement contains some of the reasons why we need to begin increasing timber sales, but I will defer going into those in detail because I suspect that it will be a subject for questioning.

Mr. YATES. There may be a few questions.

Mr. CROWELL. In addition to preparing for future sale where disasters have fueled timber stands by emphasizing reforestation rather than timber stand improvement, we are continuing on the congressionally mandated track to eliminate the reforestation backlog by 1985.

MINERALS

For minerals, the intensified interest in exploration and development on the National Forests for oil, gas and minerals resulting from the Nation's need for energy-related resources is responded to in the fiscal year 1983 budget request with a line item of $25 million, which is a 35 percent increase above the amount appropriated for fiscal year 1982. The 1982 appropriation had a 22 percent increase above the fiscal year 1981 level.

Special emphasis is being given to coal, petroleum, natural gas, geothermal energy and strategic minerals. The expanded program is necessary to keep up with the increase in the number and complexity of lease applications, operating plans and mineral claims.

Receipts from oil and gas and mineral leases on the National Forest land, which were once public domain, are collected by the Department of the Interior and so are not debited to the Forest Service. In 1982, $185 million in receipts to the Federal Government are expected to be generated from oil, gas and mineral activity on the National Forests.

In 1983, receipts are anticipated to be $227 million. Clearly, the returns are high and extremely cost effective from the costs incurred by the Forest Service of the leasing activities which generate these receipts.

RECREATION

The $97.9 million requested for recreation represents an 11 percent increase in funding over the amount of appropriations for fiscal year 1982. This more than compensates for the effects of inflation. It will offset some of the services that were formerly provided by the Youth Conservation Corps and Young Adult Conservation Corps.

This will help the Forest Service cope with the growing use of the national forests for outdoor recreation.

RESEARCH

The fiscal year 1983 budget for forest research of $98 million is 11 percent below the amount appropriated for fiscal year 1982. We will still be funding the largest forestry research program in the world, and it will be targeted to some serious problems.

For example, our research on acid precipitation will double over the fiscal year 1982 level. The Forest Service will give emphasis to maintaining ongoing research on timber management and genetics; forest products and engineering; forest economics and inventory; protection of forest and rangelands from serious insect and disease problems, and protection from fire. Lower priority research will be delayed or terminated.

The Forest Service has also participated in a joint study with the Agricultural Research Agencies and with OMB to determine if some types of research would be better left to private industry and to help identify priority areas for future work.

STATE AND PRIVATE FORESTRY

The fiscal year 1983 budget for State and private forestry of $47.5 million is 25 percent less than the amount appropriated for fiscal year 1982.

It is important to note that while not displayed in the Forest Service budget, private landowners have been given major economic incentives to engage in forest management by Public Law 96-451 which provides for tax credits and depreciation of reforestation costs.

In addition, the Economic Recovery Tax Act of 1981 reduces income and inheritance taxes which would provide additional incentives for private forest landowners.

In forest pest management, the Administration's policy is that priority will be given to protecting Federal lands from major outbreaks of pests that do serious economic damage. Our goal is to phase out funding contributions to continuing large-scale cost-sharing suppression programs that are aimed at chronic pests and do not involve Federal land.

Rural fire protection has actually increased slightly above the 1982 appropriation level.

In order to carry out the programs that are included in this budget, it will be necessary for the Forest Service further to increase efficiency. This will involve consolidating, or phasing out, of certain work units, particularly in the research programs.

PROPOSED APPROPRIATION ACT LANGUAGE CHANGE

In addition, there may be a need to look at a combination of region, station and area offices. The Appropriation Committees, in the past, have included language in the Administrative provisions of the Appropriations Act which precluded expenditures of funds to change the boundaries of any region or to move or close any regional office for research, State and private forestry and the National Forest System without the consent of the concerned congressional committees.

We are specifically requesting the Appropriation Committees to eliminate this language. We will then be able objectively to consider boundary changes and consolidation of units which could reduce cost and increase efficiency.

We, of course, will advise the concerned committees before effecting any change of that sort.

Mr. Chairman, I have touched on the programs where the Reagan Administration's new priorities are most evident and I will be happy to respond to any questions.

Chief Peterson has a prepared statement.

Mr. YATES. We will be glad to hear from Chief Peterson now.

Mr. PETERSON. Mr. Chairman, since you have accepted my statement into the record, I won't repeat those comments.

I would suggest that the fiscal year 1981 report of the Forest Service contains some accomplishments. I do have some charts I would like to use for an overview of the budget, if I might do so.

Some of the major considerations that were used in framing this budget included looking at the long-term supply and demand situation which will be discussed somewhat in detail later. We will look at long-term housing start questions, and not just the outlook for this year and next year, but beyond.

We looked at mineral exploration and development. This area is increasing at a rapid rate because of the Western Overthrust Belt as well as the Eastern Overthrust Belt.

We are looking at increased management of the national forests through increase of the management plans required by the National Forest Management Act.

Assistant Secretary Crowell has already indicated there is increased reliance on State and local governments, particularly in areas like pest management.

Increased receipts to the Federal Government, which are reflected in the budget presentation, include both timber receipts, oil and gas receipts and some increase in recreation receipts.

EMPLOYEE SUGGESTION PROGRAM

Finally, we have already touched on ideas of improving efficiency. Mr. Chairman, this has been an all-hands effort in the last 2 years at every location within the Forest Service. We had the people there say, "If you were running the Forest Service, what would you do to change things?"

We have asked them to suggest changes in procedures, regulations and law.

Mr. YATES. Who have you asked?

Mr. PETERSON. Every person in the Forest Service. We received a lot of suggestions that can be implemented locally; some require changes in regulations and some changes in the law.

Mr. YATES. Has this been a secret vote?

Mr. PETERSON. No, sir.

Mr. YATES. It ought to be so you get some responses. Go ahead.

Mr. PETERSON. We do provide for anonymous suggestions.

Mr. YATES. Okay.

Mr. PETERSON. In fact, we are doing the same thing in the Washington office, asking anybody there who has an idea to submit it either on the record or anonymously and we have received a number of them.

Mr. MCDADE. Mr. Chairman, may I comment? That is nice to hear that you are polling your people, most of whom are west of the Mississippi.

Mr. PETERSON. Percentage-wise; yes.

Mr. MCDADE. Percentage-wise? You have some people in downtown here, but when you talk about where your people are, most of them are west of the Mississippi.

Mr. PETERSON. We have people in New Hampshire and Vermont.

Mr. MCDADE. You have a couple, yes. How many do you have in Pennsylvania?

Mr. PETERSON. We have our research headquarters there.

Mr. MCDADE. How many people there?

Mr. PETERSON. Probably close to 300. I'm told it is about 150.

FOREST PEST MANAGEMENT

Mr. MCDADE. I wonder if that enormous mass of people said, "rely on State and local governments," for pest control purposes dealing with something like the gypsy moth. We have been talking about this for 10 to 15 years.

Mr. PETERSON. No, I was saying we are looking to our people to tell us how we can improve efficiency.

Mr. MCDADE. Well, I read that as a goal. The Assistant Secretary stated that as a goal of the Administration that for purposes of pest management, we are making a major departure now. If it is not a piece of Federal land, you are going to rely on State and local government to handle it.

Mr. CROWELL. Primarily.

Mr. MCDADE. It used to be a 50-50 share?

Mr. CROWELL. That is true.

Mr. MCDADE. Isn't that a pretty reasonable basis for cooperating?

Mr. CROWELL. No, I don't think so. In times when we have budget constraints like we have today, Mr. McDade, we have got to make some priority choices for available funding and in the area of pest control we have evaluated the kinds of pests that we have to deal with.

We have evaluated the sort of responsibilities that we have.

Mr. McDade. How many States are infested by the gypsy moth?

Mr. Crowell. Probably about 15.

Mr. McDade. Have you read the letter that the committee sent down to you?

Mr. Crowell. We certainly have.

Mr. McDade. What is the response? I haven't heard anything officially.

Mr. Crowell. You mean about the States' plans for continuing?

Mr. McDade. We sent you a letter that pointed out the authority that the committee gave you in the continuing resolution. Time is of the essence, as I am sure you know, once these things are out of their incubation period, you don't have an available remedy.

Mr. Crowell. This is the letter where you are asking the Secretary to decide to whom to grant the authority in the Commodity Credit Corporation.

Mr. McDade. Yes, and I talked to the Secretary personally about it. I have heard no response.

Mr. Crowell. Well, the Secretary just this morning made the decision not to exercise that emergency authority. The reason he has done that is because he feels that it would set an undesirable precedent. It would open the gates to all kinds of requests for similar suppression of insect pests, and we just don't think there will be any end to it.

OTHER INFESTATIONS AND THEIR ECONOMIC IMPACT

Mr. McDade. How many infestations do you have that affect 13, 14, 15 States?

Mr. Crowell. We have others. For example, one of the anticipated demands on the funds would be for grasshopper control in the Great Plains States. That would take a great deal of money to do that. Grasshoppers affect grain crops out there that have impact on food supply and farmers' welfare.

We don't evaluate gypsy moths in the same category as having the same kind of adverse economic impact.

I am not saying that the Secretary is going to respond to opening the fund for grasshopper control either, but this was one of the considerations that he had in mind when he decided not to exercise that emergency authority.

Mr. McDade. That couldn't be more wrong.

Mr. Crowell. Well, I am in disagreement with that.

Mr. McDade. You can write that in red, my friend. It will continue to be in red. I can't believe that he would do that when you have evidence from the Disease Control Center that the pests last year picked up some kind of a virus that infected children.

ECONOMIC IMPACT OF THE GYPSY MOTH

I don't know what you mean by economic impact. You seem to believe that an economic impact only exists on Federal lands. Is that your theory?

Mr. Crowell. No, because the economic impact of the grasshoppers——

Mr. McDade. I am not talking about the grasshopper. We can talk about that tomorrow or later.

Let's talk about the gypsy moth.

Mr. **Crowell**. Well, the gypsy moth economic impact is not one that would cause significant losses to landowners or to industrial commercial forest lands.

Mr. **McDade**. Why not?

Mr. **Crowell**. Well, the defoliation that is caused by the gypsy moth does not kill trees.

Mr. **McDade**. It certainly does kill trees. What do you mean, it doesn't kill trees?

Mr. **Crowell**. Only after repeated defoliation occurs and depending on the moisture conditions in the forest and that sort of thing.

Mr. **McDade**. "Three times," is the testimony we have had before this committee. Chief after Chief of the Forest Service has said if he was given the option based with the defoliation the third time to protect that resource which we call a tree, he would spray.

Mr. **Crowell**. There is no possibility of being able to spray 13 million acres that have been infested with gypsy moths in the past.

The spray programs have all very much been more limited to dealing with mostly suburban areas. We haven't been going into commercial stands of timber because of the expense, and the magnitude of such a control program would be just huge, and the anticipated losses——

COST SHARING OF GYPSY MOTH EXPENSES WITH THE STATES

Mr. **McDade**. So the States and local governments are going to be able to pick up that huge expenditure?

Mr. **Crowell**. The State and local governments can't make the effort to deal with all commercial forest pest control either. Where they are exercising that is in inhabited and suburban areas because of, basically, the nuisance factor of the gypsy moth. The people who have the misfortune of having them in their back yards and along their streets are bothered by them.

Mr. **McDade**. That is one of them, yes.

I have seen cases where a mother couldn't put a child outside the house.

Mr. **Crowell**. Yes.

Mr. **McDade**. In the past the Federal Government has matched roughly 50–50 in this program. You are not proposing to cut that back, are you?

Mr. **Crowell**. Yes, to 12.5 percent in fiscal year 1982.

Mr. **McDade**. You are going to ante in 12 percent from the Federal Government?

Mr. **Crowell**. Yes.

Mr. **McDade**. I don't know of anything that I have heard this week, and I have heard a lot of distressing things, that is more distressing than the testimony I am hearing from you this morning.

It represents a direct departure from what we used to do. We used to aggressively attack this problem and make an effort at least to suppress it. If you think there is no economic benefit you might visit the woods in Vermont. Sometimes they attract tourists. Maybe you are not aware of that.

Mr. **Crowell**. I am aware of that.

Mr. **McDade**. Don't you think that has an economic impact?

FEDERAL GOVERNMENT'S RESPONSIBILITY IN GYPSY MOTH CONTROL

Mr. **Crowell**. Sure, it does, but the responsibility of the Federal Government to protect against gypsy moth defoliation in all of the woods in the Northeast is impossible, Congressman.

There isn't enough money available to begin to do that.

Mr. **McDade**. So what you do is reduce the Federal contribution all the way down to 12 percent.

Mr. **Crowell**. Yes.

Mr. **McDade**. Well, if that is not a backwards step, I have never heard one.

Mr. **Crowell**. Of course, it is not moving in the direction that you would like to see it move, but we are continuing the capability to deal with evaluating the extent of gypsy moth expansion, the likelihood of its having a population collapse.

We are spending money on research.

Mr. **McDade**. You have been doing that a thousand years and hoping the bubonic plague would soon strike gypsy moths and every now and then you get a collapsed population. Every Chief of the Forest Service who has been here talks about the use of these things.

For you to cut the Federal share of the funding back to 12 percent I think is just absolutely shortsighted. I am deeply distressed to think that after I personally talked with the Secretary, he has made the decision to do this, and to change what has been a policy of the Government for some time to cooperate with States and local governments on a matching 50-50 basis. Now you want to cut that back to 12 percent, when we are facing one of the greatest infestations, one of the toughest years ever. In my view this is absolutely unconscionable.

Mr. **Crowell**. Well, you do have to recognize, Congressman, that we have other budgetary concerns and other budgetary constraints that simply make this a very difficult decision for us.

We are not pleased about having to make it, but I think it is a good decision.

Mr. **McDade**. I think you had better go back and review it, talk to the Secretary again. Talk to him today. I would like to have you look at it again.

Mr. **Crowell**. All right.

Mr. **McDade**. There are going to be a lot of things involved in the budget debates around here, but since I have been on this committee we have been rather interested in the resource base of the country and that includes all the country, not just a particular section.

If there is a forest infestation we try to cure it. The Forest Service for years has spent money trying to develop methods of suppression and a research budget that would effectively do that.

I can show you areas in my State where the Forest Service sprayed and the timber base was saved. Areas that were not sprayed were destroyed by the gypsy moth and it has now spread and it is spreading every day.

SPREADING OF GYPSY MOTHS

Do you think it is going to stop spreading?

Mr. **Crowell**. There isn't any indication for us to be optimistic that it will stop spreading.

Mr. **McDade**. None. Quite the reverse. All the indications are that this is getting worse and worse and now you have a public health problem according to the Center for Disease Control.

GYPSY MOTH VIRUS/RASH

These pests are now carrying some kind of virus with them.

Mr. **Crowell**. Well, that is news to me because the only report we have had—

Mr. **McDade**. Well, maybe during the noon recess you could call and ask them.

Mr. **Crowell**. Well, we checked the Center and the report was that in the early stages, the larva does apparently produce some kind of thread or silk of some sort which is irritating to some people's skin when it gets on the skin. It causes a rash but the rash disappears within about 7 days.

If that is going to be the basis for spending Federal money on controlling pests, we might as well undertake to control poison ivy.

Mr. **McDade**. That is ridiculous. We have a tourist industry in Pennsylvania that attracts more people than the entire Hawaiian Islands. They pay taxes, your salary, my salary, and for this program. We are being hit with this enormously; the tourists aren't coming. You haven't been up there to see it. Maybe we ought to send you up to see it.

Have you walked through it? People can't drive cars on the road. There is so much infestation of this pest, they skid off a road. And for the Forest Service, under your guidance, to say: "Well, we are going to retreat from the program," that is a policy that I hope I have made clear to you that I think is in error.

I would ask you to go back and review it with the Secretary.

Thank you, Mr. Chairman.

Mr. **Yates**. Before we go ahead with Mr. Peterson again, let me get some views from the Assistant Secretary in connection with an article that appeared in the American Forests.

Before I go into that I want to ask Dr. Buckman whether he knows about what Mr. McDade has said to be true? Is the gypsy moth now supposed to be a carrier of virus?

Mr. **Buckman**. I am not familiar with that, Mr. Chairman. I am familiar with the allergies that come from the hairs on the larva, but not the virus.

Mr. **McDade**. What was the release the Center for Disease Control put out? It is a rash, yes.

STUDIES ON GYPSY MOTH-RELATED RASH

Mr. **Ohman**. It is an allergenic reaction. It is apparently caused by the hairs on the catepillar and this causes a rash of more or less typical allergic reaction.

The reports we have from the Hershey Medical Center of Pennsylvania, Department of Health, studying the incidence of these rashes, is that one school had an attack rate of 42.4 percent—

Mr. **Yates**. You are burying your words and the Committee reporter is having trouble hearing you.

Mr. **Ohman**. I am sorry.

Mr. **Yates**. Okay, speak up.

Mr. **Ohman**. One school had an attack rate of 42.4 percent and another 25.3 percent. Rashes generally occurred on the exposed areas of the body and lasted about 7 days.

Mr. **Yates**. Is this like the poison ivy the Assistant Secretary was talking about?

Mr. **Ohman**. Not exactly, but it would be a similar kind of reaction, an allergenic reaction.

Mr. **Yates**. How serious is it? If it lasts 7 days, is it just a discomfort or is it more serious than that?

Mr. **Ohman**. My understanding is that it is more discomfort.

Mr. **McDade**. You don't die from it?

Mr. **Ohman**. Not to my knowledge, sir.

Mr. **McDade**. You are just unhappy?

Mr. **Ohman**. The report from the Hershey Medical Center was then reported by the Communicable Disease Center.

Mr. **McDade**. "The rash affected 135 of 220 students," says the Center for Disease Control; is that your figure?

Mr. **Ohman**. I am sorry, sir. I only have percentages here.

Mr. **McDade**. That is at two schools. "Gypsy moth caterpillars, best known for destroying trees, tentatively have been identified as the cause of a rash of more than 200 Pennsylvania children last spring," health officials say.

Does that coincide with your information?

Mr. **Peterson**. As far as we know, there has been no community-wide outbreak from the gypsy moth before 1981. But outside this country, reports indicate that skin rash due to gypsy moths go back to ancient Greece, and more recent rash outbreaks occurred in Israel a few years ago, so it is not unknown.

Mr. **Dicks**. Maybe we need a Grecian Formula to handle this.

Mr. **McDade**. So you can conclude that it is making an initial appearance; is that what you are saying?

Mr. **Peterson**. That is the first report we have had of a mass group.

Mr. **McDade**. So you can conclude that as the infestation continues in intensity, I suppose in this area that there will be more problems?

Mr. **Peterson**. We would think so. Different people vary in their immunity to it.

Mr. **McDade**. Yes.

Mr. **Yates**. I think that was necessary for the record.

FOREST SERVICE POLICY

Let's go to this question of policy. I think you prepare policy, Mr. Secretary, more than Mr. Peterson does?

Mr. **Crowell**. Yes.

Mr. **Yates**. These questions I have are related to policy. If members of the committee want to ask the Assistant Secretary about questions of policy, we ought to do that before we go into the Chief's testimony. For example, Mr. McDade's questions were directed to a matter of policy.

There is a cutback in research funding in pest control. I think it is well that the committee should consider that and what its effect is likely to be on the national forests and upon the people who go to the national forests.

But the issue of the American Forests article for 1982 says, "Heavy cuts in research and State and private programs, with a shift of National Forest Program emphasis to commodity production, mark the fiscal year 1983 budget for the U.S. Forest Service, submitted to Congress by President Reagan on February 8. The Forest Service research budget is 11 percent lower than 1982 appropriations, and unless altered by the lawmakers, would terminate or reduce a variety of research in silviculture, hardwood management and utilization, forest protection, wildlife protection, and economics. Closure of some research facilities and the loss of several hundred personnel are also possibilities."

Is that true, Mr. Secretary?

Mr. CROWELL. That is correct.

CLOSING OF RESEARCH FACILITIES

Mr. YATES. How many research facilities would be closed?

Mr. CROWELL. Nine are proposed for closure.

Mr. YATES. Research facilities of what kind?

Mr. CROWELL. Well, there are stations or laboratories essentially scattered around the country. Approximately eight of those probably would have been phased out even without budget cuts because of the efficiencies to be accomplished by such a phase out.

Mr. YATES. The information we have indicates that you are closing the Forest Physiology Laboratory at Beltsville for one: You don't have the list?

Mr. CROWELL. That is correct; but somebody has it here.

Mr. YATES. The Silviculture Laboratory of Bend, Oregon?

Mr. CROWELL. Yes.

Mr. AUCOIN. Could we ask what kind of research is being done at Bend?

Mr. YATES. I will read from the Forest Service statement.

> Research at Bend, Oregon on the Silviculture of Ponderosa and lodgepole Pines, in the Cascade Mountains for several decades. Many productive opportunities have been provided, the fiscal 1983 budget provides only half of the support needed. Remaining funds would be shifted to higher priority research on the silviculture of upper elevation forests now being lost.
>
> This would be assigned to the laboratory at Wenatchee, Washington.

Mr. AUCOIN. There may be another way to solve the problem, Mr. Chairman.

Mr. YATES. Then they have fire research moving to La Grande, Oregon, providing for a better scientific effort and reduction of cost. One research work unit will be affected by this and two positions would be transferred to Juneau, Alaska, one to Portland, Oregon, and four positions would be eliminated.

The laboratories at Bottineau, North Dakota; Fayetteville, Arkansas; Lehigh Acres, Florida; Lubbock, Texas; Marquette, Michigan; Reno, Nevada; Sewanee, Tennessee are all supposed to be closed.

I quote from the article from American Forests:

> The outlook for Forest Service State and private assistance program is even grimmer, with the proposed 1983 budget 25 percent lower than last year's appropriations. Funding for urban forestry and technological implementation will be eliminated, and planning assistance to States will be reduced by almost two-thirds. Reduced assistance to State nursery programs could cut seedling production by 200 million trees. The only program to receive an increase will be grants to States for rural fire prevention and control. Some personnel cuts would also result.

AFFECT OF BUDGET CUTS ON REFORESTATION

How would the proposed cuts affect the reforestation program that the committee has insisted upon over the last years?

Mr. **Crowell**. This would be the reforestation on national forest lands?

Mr. **Yates**. It would be the reforestation program to provide for completely replanting every tree that is cut.

Mr. **Crowell**. The cuts would not affect the National Forest System reforestation program. They would affect the capability of the States to accomplish some of the things that they may want to accomplish in terms of reforestation or nursery support.

Mr. **Yates**. Well, let me just invite your attention to page 152 of your justification, in which you say this:

> Approximately 220,000 acres need to be reforested annually with appropriated funds to reforest the backlog area by October 1, 1985. Priority will be given to sites needing reforestation in order to meet the 1983 backlog target and the planting of all nursery stock.
>
> In fiscal year 1981 about 218,000 acres were reforested with appropriated funds.

But then you look at your accomplishments, reforestation in acres, the 1981 actual was 218,000. In 1982, the plan is 206,000, a reduction. I take it that is a reduction below the acres that were needed to be reforested; is that correct, or did you only need to reforest the 206,000 acres?

Mr. **Peterson**. We are still on target for 1985, 206,000 carries along that path.

Mr. **Yates**. What about the 190,000 acres for 1983?

Mr. **Peterson**. That will carry us along that path.

Mr. **Yates**. Well, does that mean that the numbers will have to be increased at a later time?

Mr. **Peterson**. No.

Mr. **Yates**. You are telling the committee that reforestation of 206,000 acres 1982, and 190,000 acres in 1983 will provide for complete reforestation of the National Forest lands within the 10-year period?

Mr. **Peterson**. There will be some acres that we will not be able to reach economically within that period because of lack of access.

Mr. **Yates**. You mean like slopes and so forth?

Mr. **Peterson**. There isn't a road or access system to get in, so there are some acres that are not feasible during that period. But of the feasible acres, yes, they will be completed by 1985.

Mr. **Yates**. All right. So the committee doesn't have to worry about adequate funding for reforestation; is that correct?

Mr. **Peterson**. That is right, on National Forest land.

STATE NURSERY PROGRAMS

Mr. Yates. You also say, reduced assistance to State nursery programs would cut seedling production by 207 million seedlings in 1983.

I take it that means that the State Reforestation programs will be hurt; is that right, unless the States provide the money?

Mr. Peterson. That could be the result. Those trees are distributed by the States to private landowners either by giving them away or, more usually, selling them at cost.

Mr. Yates. So the private landowners will now have to buy their trees?

Mr. Crowell. They would have to seek other sources for their trees.

FOREST SERVICE PROGRAM EMPHASIS

Mr. Yates. The American Forests article continues: "Funding for management of the National Forest System will remain relatively undiminished from the 1982 figures, but emphasis in spending will be on programs that bring direct return to the Treasury, primarily timber and minerals. To maintain these programs, funds will have to be drawn from programs in soil and water protection, fish and wildlife management, and recreation."

Is that correct?

Mr. Crowell. We would not regard that as a correct statement, Mr. Chairman.

Mr. Yates. You would not. In what way is that not a correct statement?

Mr. AuCoin. Mr. Chairman, I cannot hear Mr. Crowell. If he would move the microphone closer.

Mr. Crowell. I can talk louder.

Mr. Dicks. Thank you.

Mr. Yates. You say that statement isn't entirely correct. Give us the correct statement.

Mr. Crowell. The emphasis on managing the National Forest System and in generating more receipts from the national forests is being supported with careful attention to continuing soil protection and to wildlife concern.

The portions of the budget which may have been reduced from 1982 would be enhancement programs for wildlife and fish which are not in connection with the increased receipts generation activities that we plan for the national forests.

Mr. Yates. The article continues, "While the cuts are clearly designed to reduce the Federal budget and the Nation's budget deficits, they also appear to be part of a larger design to divest the Forest Service of activities unrelated to management of Federal lands and turn the agency into strictly a manager of the National Forests for maximum commodity production and dollar return."

Would you agree with that statement?

FEDERAL ROLE IN RESEARCH

Mr. Crowell. No, Mr. Chairman, I would not agree with that. The reduction in research, for instance, has been motivated not with the idea of eventually phasing out research. That would be totally improper, and I am convinced that the Federal Government does have a proper role in forestry research. What we are trying to do is increase the efficiency of research to assure that the dollars we spend in a given year have some hope of return in the near future. We have been trying to emphasize research in areas that have a more immediate payoff.

We also are concerned about not performing research that could be done by the private sector and we have had the research people taking a very close, hard look at the potentials for achieving the efficiency that I have indicated.

The total reduction in research is 11 percent over what it had been in 1982. We think that this is not inappropriate in a year when we are trying to control budgets, as we are throughout the whole Federal Government.

From the standpoint of State and private forestry, there again, we do not have any intent of eliminating the program entirely, but here too, we are also trying to be more efficient with the dollars we put into it; trying to assure that the objectives of encouraging small private owners to grow timber for potential commercial use are efficiently achieved.

And we are continuing to examine the State and private forestry programs for achieving results as efficiently as we can do it.

As I indicated in my prepared statement, the Congress put in place some years ago a program for tax incentives to encourage small, private landowners. It is too early to tell just what consequences or impacts that it is having. We are optimistic that it will accomplish some of the things that direct Federal payments have accomplished in the past.

WILDERNESS AREAS

Mr. YATES. Will your emphasis be on enhancing the economic strength of the country and generating proceeds to the Federal Government? Does a statement, which appears in your written testimony mean that you will be opening up wilderness areas in the Forest Service to mining, timber or other industrial exploitations?

Mr. CROWELL. We will not be opening wilderness areas to timber production. That is prohibited by the Wilderness Act. The Wilderness Act does provide for mineral exploration and for mineral leasing, including oil and gas leasing, until the end of 1983. But I think all the members of the committee are aware of the interest that has been shown by the Interior Committee in the House and the dialogue that has been going on between Secretary Watt and the committee has led to a moratorium on any leasing activities in the wilderness until the end of this session of Congress.

Mr. YATES. I thought it was until the year 2000?

Mr. CROWELL. Well, that is the proposal that Secretary Watt has put forward for legislation which would then, of course, accomplish that purpose. But that legislation has not moved out of the committee at this point.

Mr. DICKS. Would the chairman yield at this point?

Mr. YATES. Yes, sir.

Mr. **Dicks**. Mr. Secretary, I think you are aware that recently in the State of Washington we had a controversy concerning oil and gas leasing on the Green River watershed and the Cedar River watershed. BLM wanted to go forward with these leases for oil and gas exploration on the watersheds that provide water for Seattle and Tacoma.

And, as I understand it, this was done over the objection of the Forest Service which basically said that it had not completed a proper environmental assessment and had recommended against approving the leases.

Then, BLM went forward and approved the leases and then, only after a considerable amount of public discussion in the Puget Sound area, they reversed themselves.

Now, this concerns me. This is an example of an Agency, not the Forest Service, but an Agency of this Administration that has pushed ahead on granting leases in very sensitive areas.

This continues to be a matter of grave concern not only to myself and Senator Jackson but to Senator Gorton, Congressman Pritchard and others from our state's delegation.

How can this happen if there is a moratorium on these issues?

WILDERNESS AREA LEASES

Mr. **Crowell**. Congressman, you are missing one crucial point here and that is, those leases were not in wilderness areas. They were in areas, of course, that were sensitive to the people that lived in those two cities, but they were not covered by the moratorium.

Mr. **Dicks**. Shouldn't there be the exercise of good judgment by the Administration?

Mr. **Crowell**. Surely there should be, and I think the fact that those leases were rescinded and the decision was reversed at a higher level shows that good judgment did prevail.

Mr. **Dicks**. Why didn't BLM listen to the Forest Service?

Mr. **Crowell**. I don't know the answer to that.

Mr. **Dicks**. Could we have an answer from the Forest Service? This inquiry goes to the heart of the sensitive issue of whether there are areas under consideration for leasing—areas like those which provide drinking water to major cities in my area.

We are very pleased with the Forest Service. We think they did the right thing. We wish others would listen to them.

Mr. **Crowell**. Normally, it has been quite smooth and quite effective between BLM and the Forest Service. The normal process has been that BLM defers to Forest Service recommendations. I don't know what went wrong on this one.

Mr. **Dicks**. Just to preface this matter, I understand that there has been tremendous pressure exerted by Mr. Watt on BLM to get these leases out, and that there was a backlog of leases or applications for leases that were inherited by this Administration. There have also been directives to grant these leases on a full speed ahead schedule.

Mr. **Crowell**. Again, Congressman, that is true about the backlog of lease applications generally, both on the public lands and on the National Forests but there wasn't that kind of pressure, at least that I am aware of, on these few proposals for the Green River and the Cedar River watersheds.

I don't know what the facts specifically were with respect to those five leases, or how it came about that they were issued despite the fact that the Forest Service had not finished developing its recommendations on it.

Now, Chief, maybe you know something more about it.

Mr. PETERSON. As near as I can understand, this was an administrative error that they were issued. We had tentatively recommended against the issues but we had not completed the environmental assessment. We gave them preliminary feedback when they sent the applications over and then we said we would make a further recommendation.

So we think it was an administrative error as near as we can tell. When it was called to the attention of BLM they immediately, I believe, suspended the leases, I believe is the right word.

Mr. DICKS. Now, that is a very interesting point! I thought these leases were suspended initially and then rescinded.

Mr. PETERSON. What I am saying, immediately when we notified BLM they suspended them. I think later action has been taken to rescind them. Initially they suspended them at our request.

Mr. DICKS. Do you see a pattern of activity here where BLM is ignoring your——

Mr. PETERSON. No, I certainly don't. In fact, in the 30-some years we have been working with BLM under the Memorandum of Understanding, they have not taken such action and I don't expect them to do so.

Mr. DICKS. Thank you, Mr. Chairman.

RATIONALE FOR 12.3 BBF TIMBER SALE PROGRAM

Mr. YATES. Mr. Crowell, tell us why you have established a level of 12.3 billion board feet when contractors have years of cutting ahead of them that they have not undertaken?

Mr. CROWELL. That is the explanation I had deferred from my prepared statement. I anticipated there would be interest by the committee members in that decision.

Mr. YATES. I am sure I am not the only member of the committee who is interested in that.

Mr. CROWELL. I am sure you are not.

This leads to a rather lengthy answer.

Mr. YATES. We are very comfortable and we will be very glad to hear you.

Mr. CROWELL. We started off with the fact that traditionally the Forest Service has had under contract approximately 25 billion board feet at any one time. That volume had risen to 33 billion board feet at the end of fiscal year 1982 and we believe has gone up another couple of billion board feet since then.

Mr. DICKS. Wait a minute, we are still in fiscal year——

Mr. CROWELL. I misspoke. It was the end of fiscal year 1981.

Mr. DICKS. Good. For a moment I wondered if you were a soothsayer.

Mr. CROWELL. No. But the current level under contract is about 35 billion board feet which is more than we customarily have under contract. Now, there is some good reason to have at least that much under contract because many operators in the West, who are dependent, very largely or entirely on Forest Service contracts for their timber supply, need to have more than just a couple of years under their belts. They need more raw material assurance for making their investments and for managing their investments than is afforded by simply having 2 years under contract, not always at prices, by the way, at which they know they can operate because of the escalation provisions in the Forest Service contract.

Now, complicating this situation has been the fact that there has been escalation in timber prices paid, particularly on the west side of Oregon, Washington and in northwestern California, because of the high level of competition among bidders for available Forest Service timber.

The timber supply has been too small for the anticipated needs and consequently it has forced the levels of bidding up to unprecedented heights.

Mr. **Yates**. Then why put it out for bid at this time?

Mr. **Crowell**. Well, what I am leading to, Mr. Chairman, is by increasing the supply, you are going to encourage the prices to come down and bidders will offer to pay more reasonable prices. As a consequence, they can prospectively operate the sales rather than having them pile up under contract without the possibility of being operated at high prices. The markets for the production which is made from those raw materials, from those logs is at low levels because of the poor housing demand at the present time.

Mr. **AuCoin**. Mr. Chairman, if the Administration believes that——

Mr. **Crowell**. Congressman, if I could persist in my answer and then I would be pleased to get into this to any extent you want to.

Mr. **AuCoin**. Sure, go right ahead.

Mr. **Crowell**. The problem has been that, as a result of the high prices that have been bid over the last 5 years, we have seen, not only an increase in the volume under contract, but that many operators will not be able to operate those sales before they expire. They can't operate them at levels profitably.

In other words, the raw material costs that they are committed to pay under the contracts would be too high to permit them to sell the finished products into today's depressed lumber or plywood market.

So, the Forest Service has done some extensive analysis within the last few months of this problem. They have ascertained that as much as 10 billion board feet of that estimated 35 billion board feet under contract cannot be operated at present levels for the market prices for the products, or at any prospective future level during the foreseeable life of those contracts.

So, in effect, what we have is maybe 25 billion board feet. You have to subtract that 10 billion from the 35 billion. We have 25 billion board feet under contract at operable levels today.

PREPARE FOR UPSWING IN ECONOMY

Now, with that as background, you can see that it makes economic sense to supply at least 12.3 billion board feet at least in a year when we are anticipating that harvest rates will not be particularly extensive.

Now, keep in mind the fact that the timber sold in fiscal year 1983 will not be harvested in that year. Instead, it will be harvested in years further out, 1984, 1985, 1986 and, in a few cases when the sale term may be for four years, 1987. And by those years we fully expect that the economy will be in much better condition than it is today. Also, that interest rates will have come down, that housing starts will be up again and that there will be a considerable increase in the demand for wood products.

We need to be ready for that because, if we are not, if we do not have the timber under contract and in the pipeline, so to speak, we are going to see sharp increases in the product prices for lumber and for plywood. That is something we want to avoid.

We have experienced that in the past. You saw what happened in 1969. We saw it happen again in 1973. We wish it had happened in 1978, but the boom didn't get to the extent where it did when we were beginning to be threatened by it.

So it is the need to do some advanced planning in this area that leads us to recommend a modest increase to 12.3 billion board feet in the sales program for 1983.

Now, that is not the end of the answer. The National Forests contain 50 percent of the standing soft timber supply in the country today, although they represent about 18 percent of the commercial forest land in the country.

What that means is that the country, up until now, has been more dependent upon industrial and small private ownerships than it has upon the National Forests and to a lesser extent the BLM lands as they contributed to the national timber supply.

We are in a period now when the National Forests will have to contribute more significantly to the anticipated wood needs of the country than they have in the past.

Mr. YATES. Why?

PERCENTAGE OF TIMBER ON NATIONAL FORESTS

Mr. CROWELL. Because of the fact of imbalanced timber supply, 50 percent of the merchantable timber, trees that are over 12 feet in diameter , are in the national forests. We are, in fact, under-utilized by National Forest resources. There have been good economic reasons for that but we are now at a point where we will have to make good economic use of the National Forest inventory.

That 50 percent, by the way, represents a total figure of one trillion board feet of soft timber. About another 100 billion of hardwood timber. Management of inventories by industrial owners indicates that inventory turnover rates of soft timber size runs anywhere from 3 to 5 percent the rates at which we have been managing National Forest timber, this 12.3 billion would represent an inventory turnover rate of only 1.2 percent.

So, by applying that factor, you can see that your 2 percent or 3 percent would be talking about timber harvest levels on the National Forests of 20 to 30 billion board feet annually.

Now, we are not proposing anything like that at this point.

Mr. YATES. But you may do it next year?

Mr. CROWELL. No, no. There would be no way which we could move from 12 billion feet to something like 20 billion feet in the course of a year. It would take a decade to move up to that kind of harvesting.

Mr. YATES. Well, are you on your way with this proposal?

Mr. CROWELL. What I am telling you, Mr. Chairman, is that we are going to have to increase harvest rates on the National Forests because of the increased dependency of the Nation on those forests. This is the very purpose for which they were established back in the late 1890's and early 1900's.

Mr. YATES. All right, go ahead.

Does that complete your answer?

Mr. CROWELL. Yes, sir.

Mr. AuCOIN. Mr. Chairman, may I ask a question?

Mr. YATES. Yes.

INCREASE IN TIMBER HARVEST LEVELS

Mr. AuCOIN. So the 12.3 billion board feet projection is the beginning of what you anticipate is the basis for an increase in years to come?

Mr. CROWELL. We would anticipate that we would see a gradual increase in harvest levels. What they might be, of course, depends upon the conditions of the economy, predictions about the wood needs, that sort of thing.

Mr. AuCOIN. As far forward as you can see now, based on today's realities and what can be seen of future realities, this is the beginning of what would be a steady increase in timber sales levels?

Mr. CROWELL. It should be the beginning of an increase in harvest levels in the National Forests for the next 20 to 30 years.

Mr. AuCOIN. The justification for this is that there is a need in the country and in your Agency for advanced planning in terms of having the timber there to meet construction and other needs as those needs emerge in the future?

Mr. CROWELL. Yes, plus the fact, of course, that we have the wood on the National Forests. I did not have a chance to say that much of that one trillion board feet of softwood inventory on the National Forests is old timber. It is old growth timber. It is no longer growing, at least growing rapidly. The growth rates have declined——

Mr. AuCOIN. I don't want to get into that just yet. That is related but that is not exactly what I had in mind for the purpose of this exchange. You want to advance plan the commercial aspects of the forests.

DECREASE IN SOIL AND WATER PROGRAM

But what I am curious about is how is that consistent with the decrease in funding for the long-range expenditures and functions of the budget that deal with future productivity of soils, for example, in the soils and water account?

You have a major decrease in funding there which will have significant long-term effects.

I think this budget submission for soil and water is 31 percent of RPA?

Mr. YATES. Yes.

Mr. AUCOIN. The percentage of RPA for timber sales is 78 percent. Now you know the field well enough to know, John, that what we do or don't do in soil and water will have a significant bearing on the productivity of the soils of the National Forests in future years.

If this timber sales level is being justified to the committee as the beginning of some advanced planning to meet the Nation's future needs, then forgetting the environmental arguments, of which there are many, how can you justify the decrease in the soil and water function of this budget to the tune of 31 percent of RPA?

Mr. YATES. And isn't it an evasion of current law?

Mr. CROWELL. Answering the chairman's question first, no. Answering Congressman AuCoin's question, when we put this budget together, one of the conditions I laid down was that we would not do anything to reduce or inhibit the future productivity of the lands which we were going to be harvesting.

You know that we have the provisions of the Knudsen-Vandenburg Act to accomplish reforestation of the lands we harvested and I made it clear in setting up this budget that we were not to cut corners to the point——

Mr. AUCOIN. Where there would be a negative impact on the soils?

Mr. CROWELL. That is right.

Mr. AUCOIN. John, let me ask you, how do you explain the Forest Service's own justification at page 174 which says, "The 1982 program will accomplish 5,580 acres of the estimated 290,000 acres of National Forest land currently in declining condition. Reducing the 1983 program to 400 acres postpones the time when the deterioration of these lands will be stopped and their productivity restored."

That is the Forest Service's own justification.

Mr. CROWELL. These are two separate sets of acreage we are dealing with here. The proposed program for restoring soils productivity would be the result of past disasters of some sort. For example, fires which led to some sort of erosion and that kind of thing.

We are not talking about making those expenditures in connection with lands that we are harvesting.

SOIL AND WATER SUPPORT OF TIMBER PROGRAM

Mr. AUCOIN. So to what extent, then, does the soils and water improvement function of this budget support the timber sales program?

Mr. CROWELL. It supports it very largely.

Mr. AUCOIN. Well, if you have a significant increase and you are planning future increases, how can you be going down as a percentage of RPA for soil and water, to name just one area while you are going up in timber sales as a percentage of RPA?

Mr. CROWELL. We would be deferring some of this remedial work that would be called for on lands which have experienced tree disasters in the past. We would not be deferring any expenditures in connection with soil and water protection to take place on lands which are being put under management and being harvested.

What we are talking about, essentially, is expanding the potential timber land base over what we now have.

LANDS BACKLOG DEFERMENT

Mr. AuCoin. Doesn't deferring the backlog of lands that are already in a declining position impinge on the future productivity of the National Forest?

Mr. Crowell. Eventually it would, yes.

Mr. AuCoin. Where is our advanced planning there?

Mr. Crowell. You have to put it in the framework of what is economic. We do not need to put those lands back into production at this point in history or at this point in time because we have such a wealth of production standing out there on other lands which we can utilize.

In other words, if we wanted to expend that kind of money, if we had the money to apply to it, it might be an expenditure with a very low return on investment if made now. But if you make it 20 years or even 10 years from now, the return is going to be much higher because at that point, when you are making the investment, you are going to be much closer to the time when it is desirable to have those lands in production.

Now, you know we may get to the point, Congressman, where if the population levels off, if we are not called upon to supply wood to other parts of the world, it may never be economical to invest the money in restoring the productivity of the lands that were identified for rehabilitation. That is a possibility.

AMERICAN INDUSTRY AND THE ECONOMY

Mr. AuCoin. I have spent some time studying recent literature about the general problems of American industry. One of the things that comes through in reading that current literature is that American industry, as opposed to some of the industrial giants in the world, has been spending, on a company-by-company, firm-by-firm, corporation-by-corporation basis, a decreasing amount of money in long-term investments. I am referring to research and development, long-range planning, et cetera that would in this case, lead to long-term soils and water improvement.

I see the same thing being proposed here. In fact, your justification on page 175 says, and I am quoting, "A decrease of $5,708,000 is proposed to shift these funds to the soil and water support program to insure resource outputs in the 1983 timber and minerals programs."

It seems to me that what you are proposing for the Forest Service is, in a very real sense, the same mistake that we have seen across the board in the American economy which is a short-term ethic that says: Go for it now and we will worry about future productivity, future results, future economic dividends down the road. Or maybe we will let somebody else worry about it.

John, that is the way I read these numbers and the differences between these accounts.

I have looked at quarterly statements of some of our corporate records, including forest products. I don't see much prospect, given the current situation, for the private sector, to pick up major investments in research and development if the Forest Service retreats.

Mr. CROWELL. We are mixing some apples and oranges here, Congressman.

Mr. AUCOIN. I think we are talking about a number of related things.

Mr. CROWELL. The judgments about the soil and water portion of the budget, with which you started your question, basically have been ones which I have already indicated were economic judgments.

We are trying to figure out the best point in time in which to make investments which will have—

Mr. AUCOIN. Short-term gains?

Mr. CROWELL. No, a rate of return which is justifiable.

Mr. AUCOIN. Short-term?

Mr. CROWELL. No, short-term or long-term. It doesn't make any difference if it will pay off handsomely over the long-term or the short term. If it pays off less handsomely, but you get it in the short-term, well, that is where you put the investment.

Now, from the standpoint of research, we are still proposing a $98 million commitment to research on forestry. It is a very large program.

We expect to be focusing again on the research opportunities that offer the best returns for the sort of thing that you are talking about, by analogy, private industry would do.

One of the reasons, of course, that private industry has not been able to make, or has chosen not to make, the kinds of investments you are thinking they should, and I agree would be desirable, has been because of the pinch of inflation.

With inflation coming under control, we are gradually restoring the economic climate which will encourage the type of investments in research by the private sector we all would applaud.

Mr. AUCOIN. Well, maybe you are reading different quarterly reports than I am. They don't look very enticing to me.

Mr. CROWELL. I am not denying that presently the corporate profits, particularly in the wood products industry, are lousy. But what I am saying is that we all have to be concerned about restoring the economic climate which, in turn, will improve corporate profits. Then, we will see an improvement in the sort of investments we are used to see being made by American industry which will improve the quality of life for all of us.

Mr. AUCOIN. Reasonable men will have reasonable differences on how to achieve that.

Mr. Chairman, I am not attacking timber sales levels per se. As you well know, and I think my colleagues in the committee remember, Mr. Dicks and I fought for an 11.9 billion board feet sales level last year.

We could have used some support in the second round of budget cuts which ultimately reduced that 11.9 level proposed by the Administration to 11 billion board feet. We could have used some help at that time. So Mr. Dicks and I will take a back seat to no one in terms of supporting a responsible level of timber sales.

But what causes this Member some difficulty is the balance in your approach, both with regard to the short term and the long term.

RPA FUNDING LEVELS

To finish my point, let's compare the percentages of RPA for the variety of the functions in this budget submission. Minerals area management is 65 percent of RPA; Forest research is 52 percent of RPA; State and private forestry is 34 percent of RPA; Timber sales administration and management is 78 percent of RPA; and Soil and water management is 31 percent.

Mr. YATES. Why do you state the percentages of RPA? Does that show adherence to the law?

Mr. AUCOIN. To show the degree to which each of those items approaches 100 percent of the goals established by the Resources Planning Act—the recommended program for management of our national forest resources.

My purpose is not to attack the timber sales level, per se, but to question the recommended levels of other functions in relation to that sales level.

NATIONAL FOREST MANAGEMENT ACT OF 1976

Mr. YATES. That is the point I made in connection with my question to the Secretary is whether the percentages that they have submitted to the Congress comply with the law.

I will read from the law. This is Public Law 94-588 to amend the Forest and Rangeland Renewable Resources Planning Act of 1974, and for other purposes. It states "The policy of the Congress shall be that all forested land within the National Forest System shall be maintained in appropriate forest cover with species of trees, degree of stocking, rate of growth, and conditions of stand designed to secure the maximum benefit of multiple use sustained yield management in accordance with land management plans."

It goes on to talk about reforestation. It is certain as to what is to be expected in reforestation, "to replant and otherwise treat an acreage equal to the acreage to be cut over that year, plus a sufficient portion . . . to eliminate the backlog within an 8-year period."

Of course, we started our program before passage of this Act and we established a 10-year program. The Act says do it in 8 years.

The Act goes on and talks about forest system resource planning, "In developing, maintaining and devising plans for units for the National Forest System pursuant to this section the Secretary shall assure that such plans provide for multiple use and sustained yield of the products and services obtained therefrom in accordance with the Multiple-Use Sustained-Yield Act of 1960, and in particular, including coordination of outdoor recreation, range, timber, watershed, wildlife and fish and wilderness."

It goes on talking about permitting increases in harvest practices, based on intensified management practices, such as reforestation. "Such harvest levels are decreased at the end of each planning period if such practices cannot be successfully implemented, or funds are not received to permit such practices to continue substantially as planned."

Timber will be harvested only where "Protection is provided for streams and streambanks, shorelines, lakes, wetlands, and other bodies of water." Your watersheds are specifically covered.

I point this next part out in connection with your statement. "The harvesting system to be used is not selected primarily because it will give the greatest dollar return or the greatest unit output of timber."

I gathered from your statement you were interested in the greatest dollar return?

Mr. CROWELL. We are interested in maximizing the dollar return, Mr. Chairman, but we are not doing it in violation of any of the sections of the statute you have read or any of the other sections of the statute.

PROPOSED FUNDING COMPARED TO RPA

Mr. YATES. What is the test to determine whether or not you are violating the statute or sections of the statute if it is not the percentages of RPA that you are recommending be pursued?

Certainly when you come forward with an appropriation recommendation of 31 percent of RPA for soil and water management you are not paying very much attention to soil and water management.

When you come forward with a recommendation of 43 percent for range management you are not paying much attention to range management.

When you come with a recommendation of 39 percent for wildlife and fish habitat management you are not paying much attention to that.

Recreation use is only 50 percent. I dare say that there isn't a greater source for recreation for all the people of this country. I don't except the public lands and I don't even except the parks as being a greater recreation source than the National Forests of this country, and you are providing only 50 percent of RPA for this use.

For reforestation you recommend 71 percent of RPA; forest trail management, 36 percent. That isn't very much. Forest road management, 51 percent and for land management activities, down to 36 percent. You have increased it for minerals area management. You have increased it for forest fire protection which I think is good. Cooperative law enforcement, 61 percent; timber sales administration and management is 78 percent. That is where you are aiming. That is your target.

I would have thought that your RPA percentages would have been more consistent even considering the fact that the budget is brought to us under recognized budget restraints.

Mr. Dicks has asked to ask a question.

Mr. DICKS. Unless you want to comment on that. I think it is a very worthy question.

Mr. CROWELL. All right.

Mr. YATES. Thank you.

Mr. AUCOIN. I thought it was a worthy question, too, Mr. Chairman. I want the record to show that.

Mr. CROWELL. The RPA program is really something in the nature of a wish list, if you will, about what might be accomplished if budgets are relatively unconstrained. That is not the case, as we all know. We all live in the real world.

A large part of the timber program that we are anticipating, and that we are advocating here, is designed to accomplish some of the things that were mentioned in the very first part of the quotation from the Act, Mr. Chairman.

Mr. YATES. This is right except it is the first part of the Act, not the whole Act.

I also read from other parts of the Act.

Mr. CROWELL. We are talking about improving the capability for high yield on a sustained basis of all the regular and periodic outputs from the National Forests.

In order to do that, it has to start with management to a very large degree. So the fact that we may be coming in with 78 percent of the proposed RPA program for timber management doesn't mean that you can treat it as exclusively assigned just to that one factor.

It also cuts across some of these other desirable multiple use objectives and tends to contribute to those as well.

Mr. YATES. Well, what does timber management include if it doesn't include the other aspects of RPA? The RPA program is to take care of the National Forests. Timber management, to me, is taking care of the National Forest. It is more than just the harvesting portion of it.

It is emphasizing, it seems to me, to jettison the intention of Congress in passing that legislation because Congress did not intend to emphasize the cutting of timber to that extent.

PROJECTED TIMBER HARVEST VERSUS ACTUAL

As a matter of fact, the estimates of harvest activity by the Forest Service have been consistently overstated over the last few years.

In 1979, you planned 11.5 billion board feet and there was 10.4 actual. In 1980, you planned 11.5 billion board feet and there was 9.1 actual. In 1981, there was 10.5 planned and there was actual of 8. In 1982, 11.7 billion board feet of prep., 11 billion board feet offered, and only 8.5 harvested.

Now you are requesting a sales level of 12.3 billion board feet. From what you are saying, I see this as the first effort by an Administration not to have a totally balanced program, but to move out year by year with a constantly increased cut.

You talked about you can't do the 20 billion board feet per year for another 10 years, but I bet you are aiming for it, aren't you?

Mr. CROWELL. No, we don't have specific target figures in mind.

Mr. YATES. But you do propose, in your own mind, increasing this yield?

Mr. CROWELL. Oh, yes, absolutely, increasing harvest levels from the national forests because that is necessary to bring them under management.

Mr. YATES. Not to bring them under management?

Mr. CROWELL. Yes, it is.

Mr. YATES. But to turn them over more and more to private companies which have cut their own forests down.

Mr. CROWELL. Well, the private companies do this, but they are also the conduit for getting it into the hands of home owners.

Mr. DICKS. Mr. Chairman?

Mr. YATES. Yes, Mr. Dicks.

Mr. DICKS. I would make a point that the Administration is serious about going forward with this major escalation. However, I would hope they would want to provide adequately for soils and for research. I don't see those items as mutually exclusive.

Mr. YATES. That is right. I would think they should be a necessary part of the escalated timber program. The reason I read the percentages of the RPA is to show that, in my judgment, there is an overemphasis upon cutting down the trees and not undertaking the kind of husbandry that is necessary to preserve that possibility for the future.

Mr. DICKS. Mr. Peterson, are you concerned that over the long term these cutbacks are going to detrimentally affect our ability to get the kind of increases in sales that the Secretary is talking about?

Mr. YATES. Would you yield for a moment?

Mr. DICKS. Yes.

Mr. YATES. Can you answer that question, Mr. Peterson? How much are you bound by the OMB not to tell us anything that is likely to increase an appropriation?

Mr. DICKS. Mr. Chairman, when we ask military witnesses questions like this, under the law, they are required to give us their personal and professional opinion as people who have an expertise. I would certainy hope the head of the Forest Service would give us his best assessment.

Mr. YATES. But he is not in the Defense Department.

Mr. DICKS. But he is head of the Forest Service and the Forest Service has a longer term agenda than any Agency in the administration.

Mr. YATES. But he is certainly here in defense of the budget.

Mr. DICKS. What are you doing in this area, Mr. Peterson?

Mr. CROWELL. Mr. Chairman, he can answer that question without violating any strictures from OMB.

Mr. PETERSON. I am trying to answer the question if you all agree that I should.

Mr. DICKS. The debate finished and we decided you should.

SOIL AND WATER FUNDING

Mr. PETERSON. Let me say that on the soil and water item, Secretary Crowell and I discussed this and we are in agreement that we should not cause any additional problems by harvesting.

In other words, it would not be good stewardship of the land if we carried out timber harvest and created additional soil and water problems.

So I am satisfied that the program is designed to do that and that is our commitment.

Mr. AUCOIN. What was your request to the Secretary on soil and water improvement?

Mr. YATES. Do you yield for that question?

Mr. DICKS. Yes.

Mr. **Peterson**. Our total request to the Department for soil and water was $37.88 million.

Mr. **Dicks**. And what did you get from the Secretary?

Mr. **Peterson**. The request the Department made to OMB and what we got was essentially the same at about $23.7 or $23.8 million.

Mr. **Dicks**. So you were cut $14 million?

Mr. **Peterson**. Yes.

Now, the second part of the question—

Mr. **Yates**. Wait a minute. You were cut by $14 million?

Mr. **Peterson**. Yes.

Mr. **Yates**. And I think you ought to put into the record a list of the projects that you wanted the money for that were cut out by the Department and OMB. You can do that, can't you?

Mr. **Peterson**. I believe so; yes, sir.

Mr. **Crowell**. Yes.

[The information follows:]

Soil and Water Reduction

The Regions have identified several thousand individual soil and water projects to be deferred. These have been aggregated by program activity areas and displayed by regional and national totals on the following table.

As noted in the testimony, the budget is sufficient to ensure that the increased timber and mineral activity being proposed will not cause any additional soil and water problems. Rehabilitating areas in the backlog is essentially an investment decision. In some cases erosion is minimal or has stopped and the only problem is that the land is below its productive potential. In determining how much total funding to allocate and which projects to approve, it is necessary to weigh the returns that would be realized from increased outputs or avoidance of further losses against other resource investment opportunities such as big game habitat improvement or road construction to provide access for timber sales and fire fighting. The Administration's budget is a rational allocation of funding given the need to keep total spending within a reasonable bound, increase commodity outputs without deleterious effects on the environment, and fund those investment opportunities which promise the greatest return.

The table indicates that a total of $13.3 million of soil and water projects were deferred. This figure does not include program management costs and is that part of the $14 million available for direct project work.

Following are descriptions of the program activities included in the table:

(1) *Soil inventories.*—Such inventories describe, map, and interpret the basic soil resource so that the information may be used in land management planning and resource management activities. Information and interpretations include soil productivity and reforestation potentials and extent and location of soils having erosion or stability problems, as well as conditions requiring special management considerations.

(2) *Water inventories.*—This is the identification of water resources and the determination of condition of water flows for the purpose of developing basic data and interpretations needed for land and resource management plans.

(3) *Monitoring.*—This involves the analysis of the effects of management activities upon soil and water resources, which provide a basis for determining the effectiveness of existing management practices in meeting management objectives.

(4) *Water rights adjudications.*—These are legal proceedings by State or Federal courts or the administrators of State water rights program for the appropriation and apportionment of water. Forest Service involvement included the identification, quantification, and securing of existing and forseeable water uses to ensure availability of water needed to manage National Forest System lands.

(5) *Surveys for instream flow needs.*—These surveys are made to identify and evaluate resource values dependent upon a certain level or amount of water in a stream channel. These water dependent values may include the stability of the stream channel, maintenance of wetland and riparian vegetation needed by wildlife and fish, recreation use, and aesthetics. The information is used in forest planning and in seeking assurance of essential flows under Federal and State laws.

(6) *Water rights-new sources not verified or quantified.*—This is the identification and quantification of water and water sources needed to carry out management responsibilities on National Forest System lands.

(7) *Support to other resources foregone.*—This is the application of soil and water technology in the planning and implementation of resource management projects. Those cost estimates reflect support work that would have been accommodated without the budget reduction.

(8) *Out-service activities.*—Out-service activities deferred include Forest Service input to the planning and assessment of water development projects being proposed on National Forest System lands from Federal, State, and private organizations. These include irrigation projects such as the Central Utah project and numerous hydroelectric proposals from private municipalities.

(9) *Improvement maintenance.*—This is maintenance of existing soil and water resource improvements to ensure the continued effectiveness of treatments implemented.

(10) *Improvements.*—The soil and water improvement program involves the installation of such measures as erosion control structures, reshaping of gullied lands, revegetation of denuded areas, and vegetation manipulation designed to increase water yield. Improvement objectives are to maintain or restore favorable conditions of waterflow and soil productivity.

FISCAL YEAR 1983 SOIL AND WATER PROJECTS DEFERRED

[Dollar amounts in millions]

Region	Soil inventory deferred (1)		Water inventory deferred (2)		Monitoring deferred (3)		Water rights adjudications not prepared for (4)		Surveys for instream flow needs deferred (5)		Water rights new sources not verified or quantified (6)		Support to other resources foregone (7)	Outservice activities deferred (8)		Improvement maintenance deferred (9)		Improvements deferred (10)		Total
	Millions of acres	Cost	Millions of acres	Cost	Number of Stations	Cost	Number of cases	Cost	Miles of stream	Cost	Number	Cost	Cost	Number	Cost	Acres	Cost	Acres	Cost	
Northern 1	480	$305	5	$52	301	$297	8	$42	1,566	$127	20	$4	$0	20	$4	$11	$129	$310	$100	$1,060
Rocky Mountain 2	405	200	210	35	144	110							255			400	50	412	150	800
Southwestern 3	425	406	1,043	104	201	150					1,838	125						3,018	406	1,191
Intermountain 4	786	210	571	112	281	150	1	1	291	35	175	12	317	28	21	530	41	435	200	1,099
Pacific Southwestern 5	580	437	1,053	325	356	234	3	32	809	190	235	74	119	36	30	1,385	135	1,973	730	2,306
Pacific Northwestern 6	690	306	410	50	1,650	1,078					200	1	802	178	596	325	8	910	597	3,438
Southern 8	1,317	438	313	30	24	30	1	2	365	5						459	145	495	715	1,365
Eastern 9	490	158	210	57	410	100							409					220	165	889
Alaska 10	1,000	600	494	221	16	116	1	10	3	2				1	40	25	9	237	154	1,152
Total	6,173	3,060	4,309	986	3,383	2,265	14	87	3,034	359	2,468	216	1,902	263	691	3,135	517	8,010	3,217	13,300

Mr. **Peterson**. The second part of the question that has already been partially addressed is about the remaining work. Some of this is because of past fires, abused land that we acquired or sudden storms in areas which may or may not be timbered. Only about half of the National Forests is timbered. We have a substantial amount of areas that need restoration work and that has been deferred.

Mr. **Dicks**. All of it?

SOIL AND WATER IMPROVEMENT

Mr. **Peterson**. No, we are doing about 5,000 acres, I believe, out of a total of about 290,000 acres that could be done.

Mr. **Yates**. Well, the answer to Mr. Dicks' question is, "Relatively, yes"?

Mr. **Dicks**. Why is that being done?

Are you talking now about your major effort on reforestation?

Mr. **Peterson**. No, no.

Mr. **Dicks**. You are just talking about restoration of eroding soils?

Mr. **Peterson**. Soil and water problems. Some of these may be abandoned mines, or areas that were overgrazed at one time that no longer have livestock on them. It may also be land that was acquired which is in poor shape.

It represents desirable restoration, but it is subject to a test of whether you would put your money there to restore it, would you do some increased insect and disease work, or would you do increased fire protection, all of which help provide a future timber supply.

Mr. **Dicks**. So what you are saying is that there is a lot more that could be done here and it is basically being deferred because of budgetary considerations?

Mr. **Crowell**. Not just budgetary considerations but because of the fact that we do not get a reasonable return on the investment. If you make the investment of several hundred dollars an acre and all you are going to get out of it is being able to graze a few cows on it, it may not be an appropriate investment to make, to restore that area to productivity because that money could be spent somewhere else where you can get at least your investment back.

Mr. **Dicks**. How much of it would be in the category that the Assistant Secretary says and how much of it would be in what you would call acreage that is highly desirable to restore from a forestry perspective?

Mr. **Peterson**. I can't tell you precisely.

Mr. **Dicks**. Can you provide this information for the record?

Mr. **Peterson**. Yes.

Mr. **Dicks**. For now, would you give us your rough assessment? You can refine it for the record.

[The information follows:]

Declining Soil Condition

The following tables summarize the highly desirable watershed improvement projects by Forest Service regions and forests, showing the total acres and costs involved. The National Summary Table shows, from a forestry perspective, there are 1669 such projects encompassing 208,015 acres. All tables were compiled using infor-

mation obtained from as yet incomplete Forest inventories which describe several thousand individual watershed improvement projects. In addition to identifying the estimated 290,000 acres in declining watershed condition, these inventories, when complete, will also identify watershed areas which although not necessarily in declining condition, are nevertheless in unsatisfactory watershed condition in relation to their productive potential and ability to maintain favorable conditions of water flow.

NATIONAL SUMMARY OF HIGHEST PRIORITY WATERSHED IMPROVEMENT PROJECTS IDENTIFIED BY REGIONS

[Dollars in thousands]

Forest service region	Number of projects	Number of acres	Cost
1 (Northern)	130	5,954	$1,852.8
2 (Rocky Mountain)	149	11,929	1,895.5
3 (Southwestern)	45	99,132	4,476.0
4 (Intermountain)	423	57,849	12,652.4
5 (Pacific Southwest)	256	17,766	16,584.3
6 (Pacific Northwest)	384	12,970	11,307.8
8 (Southern)	150	1,386	3,410.0
9 (Eastern)	127	950	5,444.1
10 (Alaska)	5	79	49.7
Total	1,669	208,015	57,672.6

REGION 1—HIGHEST PRIORITY WATERSHED IMPROVEMENT PROJECTS

[Dollars in thousands]

National forest	Number of projects	Acres	Cost
Beaverhead	10	62	$87.1
Bitterroot	10	476	34.2
Idaho Panhandle	10	116	273.0
Clearwater	10	60	167.7
Custer	10	1,380	142.6
Deerlodge	10	671	145.2
Flathead	10	191	33.6
Gallatin	10	136	329.1
Helena	10	208	81.6
Kootenai	10	34	47.4
Lewis and Clark	10	53	35.6
Lolo	10	2,404	283.6
Nezperce	10	163	192.1
Total	130	5,954	1,852.8

REGION 2—HIGHEST PRIORITY WATERSHED IMPROVEMENT PROJECTS

[Dollars in thousands]

National forest	Number of projects	Acres	Cost
Bighorn	12	104	$71.7
Blackhills	20	656	183.8
Grand Mesa, Uncompahgre and Gunnison	14	222	104.7
Medicine Bow	3	901	112.6
Nebraska	3	253	210.1
Rio Grande	16	249	440.2
Arapaho and Roosevelt	23	457	97.8
Routt	10	60	23.6

REGION 2—HIGHEST PRIORITY WATERSHED IMPROVEMENT PROJECTS—Continued

[Dollars in thousands]

National forest	Number of projects	Acres	Cost
Pike and San Isabel	12	5,950	138.5
San Juan	16	2,373	206.2
Shoshone	14	450	230.0
White River	6	254	40.3
Total	149	11,929	1,895.5

REGION 3—HIGHEST PRIORITY WATERSHED IMPROVEMENT PROJECTS

[Dollars in thousands]

National forest	Number of projects	Acres	Cost
Carson	6	2,357	$724.1
Cibola	7	8,940	285.9
Coconino	3	2,920	87.7
Coronado	2	3,891	214.0
Gila	2	290	31.0
Kaibab	8	60,938	2,433.9
Lincoln	1	138	11.2
Prescott	9	13,543	306.7
Santa Fe	3	545	141.0
Tonto	4	5,570	240.5
Total	45	99,132	4,476.0

REGION 4—HIGHEST PRIORITY WATERSHED IMPROVEMENT PROJECTS

[Dollars in thousands]

National forest	Number of projects	Acres	Cost
Ashley	19	577	$172.3
Boise	26	240	133.0
Bridger-Teton	50	19,928	4,012.8
Caribou	16	108	43.1
Challis	13	968	171.9
Dixie	15	187	249.0
Fishlake	40	7,830	666.5
Humboldt	34	432	198.4
Manti-Lasal	34	17,147	1,933.0
Payette	42	1,997	294.2
Salmon	14	357	98.6
Sawtooth	21	308	175.0
Targhee	14	1,815	706.0
Toiyabe	23	2,011	2,429.0
Uinta	15	3,614	1,226.9
Wasatch-Cache	47	330	142.7
Total	423	57,849	12,652.4

REGION 5—HIGHEST PRIORITY WATERSHED IMPROVEMENT PROJECTS

[Dollars in thousands]

National forest	Number of projects	Acres	Cost
Angeles	5	281	$4105.0
Cleveland	19	113	99.5
Eldorado	4	559	71.2
Inyo	59	7,704	12,327.3
Klamath	24	305	489.7
Lake Tahoe Basin Management Unit	13	552	670.0
Lassen	4	14	41.0
Los Padres	4	16	97.0
Mendocino	6	5,730	288.0
Modoc	3	185	196.7
Plumas	22	217	1,195.1
San Bernardino	30	156	221.0
Sequoia	7	594	90.6
Shasta-Trinity	9	144	83.0
Sierra	32	194	139.0
Six River	6	107	343.3
Stanislaus	3	535	65.4
Tahoe	6	360	61.5
Total	256	17,766	16,584.3

REGION 6—HIGHEST PRIORITY WATERSHED IMPROVEMENT PROJECTS

[Dollars in thousands]

National forest	Number of projects	Acres	Cost
Colville	46	380	$276.8
Deschutes	17	1,569	102.1
Fremont	30	302	284.2
Gifford Pinchot	23	2,162	472.5
Malheur	34	1,942	888.8
Mount Baker-Snoqualmie	20	294	201.1
Mount Hood	20	131	76.4
Ochoco	13	200	58.2
Okanogan	12	20	488.3
Olympic	10	34	67.1
Rogue River	9	29	77.1
Siskiyou	7	1,485	1,249.2
Siuslaw	6	28	368.7
Umatilla	6	34	83.0
Umpqua	16	973	1,883.0
Wallowa-Whitman	49	2,580	1,693.0
Wenatchee	23	477	2,559.7
Willamette	41	316	366.1
Winema	2	14	112.5
Total	384	12,970	11,307.8

REGION 8—HIGHEST PRIORITY WATERSHED IMPROVEMENT PROJECTS

[Dollars in thousands]

National forest	Number of projects	Acres	Cost
National forests in Alabama	10	50	$58.6
Ozark-St. Francis	10	37	513.6
Ouachita	10	24	42.5

REGION 8—HIGHEST PRIORITY WATERSHED IMPROVEMENT PROJECTS—Continued

[Dollars in thousands]

National forest	Number of projects	Acres	Cost
National forests in Florida	10	47	31.1
Chattahoochee-Oconee	10	49	72.6
Daniel Boone	10	204	1,150.0
Kisatchie	10	130	313.7
National forests in Mississippi	10	43	45.6
National forests in North Carolina	10	59	65.7
Caribbean	10	23	55.2
Francis Marion and Sumter	10	62	118.8
Cherokee	10	28	34.1
National forests in Texas	10	412	195.0
George Washington	10	32	25.9
Jefferson	10	186	687.6
Total	150	1,386	3,410.0

REGION 9—HIGHEST PRIORITY WATERSHED IMPROVEMENT PROJECTS

[Dollars in thousands]

National forest	Number of projects	Acres	Cost
Allegheny	2	44	$748.0
Mark Twain	14	193	189.2
Chippewa	3	1	3.9
Superior	2	7	8.5
Green Mountain	16	23	18.1
Shawnee	16	413	2,118.0
Huron-Manistee	33	62	218.8
Wayne	4	145	1,880.0
Hoosier	2	4	60.0
Chequamegon	6	9	18.9
Nicolet	2	1	8.0
Hiawatha	15	31	119.8
White Mountain	3	3	13.9
Monongahela	5	10	27.0
Ottawa	4	4	12.0
Total	127	950	5,444.1

REGION 10—HIGHEST PRIORITY WATERSHED IMPROVEMENT PROJECTS

[Dollars in thousands]

National forest	Number of projects	Acres	Cost
Tongass	5	79	$49.7
Total	5	79	49.7

Mr. PETERSON. Let me say first that 290,000 acres is not all the acres out there that could be done. There has been some assessment already of what would be desirable.

If I had to guess, I would guess about half the acreage would pass some kind of cost-effectiveness test.

Mr. YATES. When you say 290,000 acres isn't the sum of all the acres that could be done? What is the total sum?

Mr. PETERSON. When you talk about erosion from land areas, these land areas are in all kinds of condition, you see.

Mr. YATES. I thought Mr. Dicks was asking you what is the total number of acres that you should be paying attention to. You gave him an answer of 290,000 and I thought your subsequent answer indicated that 290,000 wasn't the entire number.

Mr. PETERSON. We have some acreage that might be in less than desirable condition, but in no way could you afford to spend a substantial amount of money to do anything about it because the erosion rate may be not very great. It might be desirable if you would like to do it.

Mr. YATES. To do what? What would be the purpose of rehabilitating that?

Mr. PETERSON. To reduce rates of erosion.

Mr. YATES. Suppose you did that, what would be the use of the land then?

Mr. PETERSON. It might just grow more grass.

Mr. YATES. For grazing land, you mean?

Mr. PETERSON. Yes, or it might be to improve fishing and stream conditions. But the 290,000 acres has gone through some sorting in the field to indicate those acres which would make sense to do something about.

Mr. DICKS. So 290,000 acres have been evaluated by the Forest Service over prior years and of that, in this budget, you are addressing 5,000 acres?

Mr. PETERSON. Let me point out that we plan to do 5,580 in 1982. We will be down to about 400 acres in 1983.

Mr. YATES. 400 acres of the 290,000. You are down to 400 acres that you are going to work on in 1983?

Mr. PETERSON. Of old problem areas, yes.

Mr. DICKS. What about new problem areas?

Mr. PETERSON. Our basic objective is to prevent new problem areas.

Mr. DICKS. So, no matter how you analyze this there has been a very substantial reduction in effort in this area?

Mr. PETERSON. It is a reduction of effort in this area, that is right.

TIMBER SALE PROCEDURE CHANGES

Mr. DICKS. On April 15th you put out a press release concerning changes in forest timber sales procedures. Some of the changes were supposed to reduce speculative bidding for National Forest timber, provide a more prompt and orderly harvesting of timber, speed the flow of cash from timber sales to the U.S. Treasury and local governments and reduce the need for future timber sale contract extensions.

Why are these changes necessary and how will the changes produce the desired results?

Mr. PETERSON. As you are aware, in 1978, 1979 and 1980 primarily, because of a prediction of inflation, a shortage in supply, and a very low cost of holding sales, we had unprecedented overbids in timber.

Therefore, many firms bid on a basis of this "up market" realizing that if it didn't come about, it would cost them practically nothing to get from here to there and the inflation would take care of it.

Because inflation did not continue, we find ourselves with 10 billion board feet of timber that is economically unavailable.

Mr. DICKS. This is out of 33 billion board feet under contract?

Mr. PETERSON. Yes.

What we are trying to do in this——

Mr. DICKS. Before we get to that let's talk about this 10 billion board feet. What is going to happen to the 10 billion?

Mr. PETERSON. If you can tell me what the future markets were going to do, I could tell you.

Mr. DICKS. I understood the Assistant Secretary and you to state that in your judgment the 10 billion board feet under contract was not economically viable at this point or in the foreseeable future. Is my understanding correct?

Mr. PETERSON. That is right.

Mr. DICKS. Do you anticipate defaults on the 10 billion board feet under contract?

VARIOUS RELIEF OPTIONS AVAILABLE

Mr. CROWELL. That is possible, Congressman. The other possibility is that we have already made available some extensions which will give the markets time to recover and it would, therefore, make it possible or conceivable that some of those sales could be harvested.

Mr. YATES. So we can't really take that whole 10 billion out of the 30 billion board feet backlog.

Mr. CROWELL. No, you can't, that is true.

However, with the continued poor state of the markets for lumber and plywood products, some of these contracts have already gotten into their extension period. We are very definitely going to have to look at some form of additional relief unless the contracts are simply going to be allowed to go into default as a result of these adverse conditions.

Mr. DICKS. As you know, there has been considerable debate within the industry about what the right course of action is. There exists a definite concern about these companies failing or going into default and not being able to perform on contracts. But there are others who believe if you really want to end speculative bidding there is only one way to do it—and that is with the harsh penalties of the free market system.

Now, you have mentioned additional forms of relief. I am not expecting you to spell out the form of this relief in detail or in terms of what decision has been made, but what are the options?

What are the possible areas of additional relief you have considered?

Mr. CROWELL. The options would be several. One would be to modify the conditions under which extensions have been offered and made available to date. The terms were rather stringent about calling for down payments and for, in some cases, completion of construction of roads.

Some relaxation of that sort could be worked out. In fact, just last week or so we asked the Attorney General for an opinion about our existing authority, instead of the cash deposits that we had made as a condition of extensions, of just requiring the purchaser to pay interest on the unpaid purchase price on the contract.

Now, the second possible solution would be some sort of a price rollback provision which has been much discussed in the industry and among interested legislators. The complexities of doing that, however, are rather great. That idea seems to have receded somewhat in favor of still another alternative which would be some sort of contract termination either with or without penalties.

Mr. Dicks [presiding]. Are you checking with the GAO about what legal authority you have or do not have. This might be advisable since we are discussing contracts under which the Treasury is to receive money.

What is the authority of the Forest Service to operate in this area?

Mr. Peterson. Let me address it a little more.

You see, ordinarily we don't require these deposits. So the way the sales were originally written, deposits were not required. When we granted extensions, as a condition of those extensions, we required deposits.

Mr. Dicks. Under the law, do you have the authority to grant extensions?

Mr. Peterson. Yes, as a condition of those extensions we required deposits.

The question is, having once done that through the Comptroller, do we have an opportunity now, because of the unprecedented situation, to relax that requirement?

Mr. Dicks. Are you attempting to determine whether you have the authority to do this.

Mr. Peterson. Right. And we are not sure of that. We expect to hear from the Comptroller reasonably soon.

[The advance decision of the Comptroller General follows:]

DECISION

THE COMPTROLLER GENERAL
OF THE UNITED STATES
WASHINGTON, D.C. 20548

FILE: B-207165 DATE: May 3, 1982

MATTER OF: Department of Agriculture--
Request for Advance Decision

DIGEST:

Modification of timber sale contracts to permit contractors to defer required monthly payments is permissible where contractors agree to pay interest for deferred payment period, since interest is legal consideration.

The Secretary of Agriculture has requested an advance decision of this Office concerning the proposed modification of a number of timber sale contracts.

We have no legal objection to the modifications.

On May 24, 1980, the United States Forest Service extended a number of timber sale contracts entered into prior to April 1, 1980, and due to terminate prior to April 1982. Due to extremely unfavorable economic conditions in the timber industry, it appeared that the contractors would be unable to perform within the contract term, and would face default terminations if the contracts were not extended. The extensions were made under the authority of 16 U.S.C. § 472a(c) (1976), which authorizes the Secretary of Agriculture to grant extensions when he finds that the substantial overriding public interest justifies the extensions. As a condition of extending the contracts for the benefit of the contractors, the Forest Service modified the payment provision of the contracts to benefit the Government. Prior to the extension, the contracts contained the standard payment clause, which requires that payment be made shortly before timber is actually cut. After the extension, the contracts contained a clause requiring monthly payments to be made during the first operating season so that all timber would be paid for by the last day of the season, whether or not timber was actually cut.

The first of these payments is due in May 1982, and economic conditions have not improved in the timber industry. Consequently, the Forest Service proposes a further modification of the payment terms of the contract to essentially waive the monthly payment requirement and return to the previous system of payment just prior to cutting. In return, the Forest Service proposes to require the contractors to pay interest on the deferred payments for the period from the payment due dates until payment is actually made. The interest rate is to be set by the prevailing Department of the Treasury interest rates.

As the Forest Service recognized in its request, no officer or agent of the Government has authority to relinquish a vested contractual right of the Government without adequate legal consideration. *Bausch & Lomb Optical Co.* v. *United States*, 78 Ct. Cl. 584, *cert. denied*, 292 U.S. 645 (1934). The contractual right in question here is the right to the payments on the dates that they are due. If the contracts are modified as proposed, the Government will still retain the right to the money involved, but will receive it at a later date. Consequently, the Government will lose the use of the money for the deferred payment period. In our opinion, interest for that period at the fair market rate is legal consideration for the Government's deferral of the time for payment. *See, e.g.*, *Brooklyn Bank* v. *O'Neil*, 324 U.S. 697 (1945); *Deputy* v. *Dupont*, 308 U.S. 488, 498 (1940); *Daniel* v. *First National Bank of Birmingham*, 228 F.2d 803, 806 (1956). Therefore, we have no legal objection to this proposed modification.

Milton J. Socolar

Acting Comptroller General
of the United States

Mr. **Dicks**. Are there other options that you have considered in addition to those you have mentioned?

Mr. **Crowell**. One of the other things that we have done, as you are probably aware, Congressman Dicks, is to make some small volume short-term sales with the expectation that these could bring considerably reduced prices at levels which would permit those sales to be operated profitably.

Mr. **Dicks**. Is that happening?

Mr. **Crowell**. Yes. We are very pleased with the results of that program. We have sold approximately half a billion board-feet under that program and sale prices levels have come down very substantially to levels which would permit operation under the terms of the contract.

The terms, by the way, have been either 1- year or 2-year terms. So we do expect that it will see a resumption of some activity in the woods, in the mills and in the region that has been most affected by this problem. We also anticipate that it will improve the share of receipts that gets paid to the county and, of course, the inflow of some receipts to the Treasury.

ADDITIONAL TIMBER SALE PROCEDURE COMMENTS

Mr. **Dicks**. Is there anything else you would like to mention about changes in forest timber sales procedures that you haven't already mentioned?

Mr. **Peterson**. I think we probably should point out that we tried not to overreact to this problem. Several of the requirements are not being applied to sales of less than 3 years in duration and they are not being applied to sales of less than $10,000.

So we did not put these requirements on sales where we have not had that kind of problem. It has been the longer term sales and the higher volume sales that have caused the problem.

Mr. **Crowell**. The other thing that might be said, Congressman, is that those changes in contract procedures were a second part of the relief which we had granted. Back in the middle of October, we made available extensions to contracts that had qualified for the extensions that were available back in April of 1980.

We had at that point told the industry and the public that as a condition of discretionary relief, we felt constrained to take some steps that would prevent this same kind of situation from arising again.

So it shouldn't be lost sight of the fact that the extensions that were made available in mid-October of 1981 were the first half of this remedial program, and the changes in contract procedures announced earlier this month were the second half.

ADDITIONAL SOIL AND WATER COMMENTS

Mr. **Peterson**. Mr. Chairman, I wonder if I might supplement my statement to you on soil and water so that I don't give you an incomplete answer.

The most likely places that we will have problems are not in the timbered areas. Only about half the National Forest is commercially forested land.

We have about 90 million acres that are grassland or brush. There are unpredicted kinds of impacts from uses imposed by others. Someone wants to build a pipeline across the land, a road, a powerline, you name it.

We are never able to predict very accurately what that kind of impact will be. We have searched for ways to charge additional costs to those that propose it, but many of them are small activities. Such as somebody wanting to build 2 miles of road because a National Forest is intermingled with private land.

We are going to have to work very hard to be sure that we don't have undue impact from those kind of activities, not the kind of activities that we do but the impacts of others.

Mr. DICKS. I would hope that as part of your contract for letting them do that, provided you have the authority, you would make them pay for it.

Mr. PETERSON. They pay the fair market value for the use but that is an amount that goes to the Treasury.

We don't have those receipts directly.

Mr. DICKS. Under existing law, can't you require that as a condition of letting them have access to the land, they must do the certain things to keep it in good shape?

Mr. PETERSON. We do that in the case of major impacts. Some of these the people have statutory rights of ingress and egress. But I wanted to point out that we think we have adequately taken care of the kinds of activities we are going to, do particularly related to timber, but we will be deferring on this long-range investment.

Mr. DICKS. Is that what the $14 million reduction is?

Mr. PETERSON. Right.

THIRD PARTY SUBSTITUTION

Mr. DICKS. On March 3rd, 1982, a letter was sent by you, Mr. Peterson, to Mr. Whitten, the chairman of the Appropriations Committee, on the issue of third party substitution.

I would like you to summarize your findings and tell us what you concluded.

I understand that the information and data here comes as a result of the new regulations that were put into place at the urging of this committee so we would have a better reporting system.

This information resulted from the hearings that this committee requested a year to a year and a half ago in Region 6. At that time, we had a chance to hear from numerous individuals and we learned that there was still great concern and suspicion about this matter. Because of this, the committee through its regulations and through your good work, tried to get a better handle on this matter so that everybody would know what the true situation was.

And I have looked at this report. I find it very interesting. I would like to have your summary of it and I would ask consent to put the relevant portions into the record at this point.

[The information follows:]

Third Party Substitution
(Summary of Whitten 3/3/82 letter)

Directions set forth in the 1981 Appropriations Act for the Department of the Interior and Related Agencies required the Forest Service to continue monitoring the log export and substitution activities, if feasible. Regulations adopted by the Secretary require bidders on national forest timber sales to provide a report showing the disposition of unprocessed national forest timber harvested during the previous calendar year.

It is estimated that the report for 1980 includes about 80% of the harvested volume because not all purchasers who harvested timber in 1980 bid on sales in 1981.

Forest timber required by firms who are not eligible to purchase the timber directly is relatively small. The 1980 data based on the new regulation continues to indicate that the volume of logs purchased from or sold to third parties and possible substituted for exported private logs is not significant.

Disposition of National Forest Timber Harvested and Private Timber Exported During C.Y. 1980 by Bidders of National Forest Timber 1/

National Summary

	I		II		III		IV	V	VI
	National Forest Timber Processed Domestically 2/		National Forest Timber Sold Domestically 3/		Sold Domestically to Processor who could not have Purchased Directly 4/		National Forest Surplus Timber Exported or Sold for Export 5/	Total NF Timber in Sample 6/	Private Timber Exported or Sold for Export by Bidder 7/
	Volume (MBF)	%	Volume (MBF)	%	Volume (MBF)	%	Volume (MBF)	Volume (MBF)	Volume (MBF)
R-1	463,386	84	90,295	16	None	None	None	553,681	None
R-2	149,794	100	None	None	None	None	None	149,794	None
R-3	228,550	100	None	None	None	None	None	228,550	None
R-4	323,409	100	None	None	None	None	None	323,409	None
R-5	1,000,209	81	237,718	19	4,420	.36	545	1,238,472	2,000
R-6	2,338,176	77	697,199	23	993	.03	17,722	3,053,097	133,485
Totals:	4,503,524	81%	1,025,212	19%	5,413	.10%	18,267	5,547,003	135,485

	I	II	III	IV	V	VI
			Region 5			
Eldorado	195,323	11,286	0	--	206,609	--
Klamath	119,265	56,840	3,173	71	176,176	--
Lassen	58,001	11,329	0	--	69,330	--
Mendocino	70,341	91,318	--	--	161,659	--
Modoc	16,150	193	0	--	16,343	--
Six Rivers	79,015	19,393	651	474	98,882	2,000
Plumas	38,825	58	--	--	38,883	--
San Bernardino	500	500	0	--	1,000	--
Sequoia	--	14,767	0	--	14,767	--
Sierra	62,597	3,243	0	--	65,840	--
Shasta-Trinity	68,858	9,998	596	--	78,856	--
Stanislaus	210,934	7,240	0	--	218,174	--
Tahoe	80,400	11,553	--	--	91,953	--
TOTALS	1,000,209	237,718	4,420	545	1,238,472	2,000
	(81%)	(19%)	(.4%)			
			Region 6			
Colville	52,759	1,472	--	--	54,231	--
Deschutes	176,695	13,547	--	--	190,242	--
Fremont	73,627	6,000	--	--	79,627	--
G. Pinchot	192,493	138,154	83	8,090	338,737	33,356
Malheur	99,601	11,406	218	--	111,007	--
Mt. B-Snoq	125,348	85,440	--	1,797	212,585	44,812
Mt. Hood	245,331	66,895	98	152	312,378	50,709
Ochoco	63,754	18,440	570	--	82,194	--
Okanogan	73,368	11,286	--	--	84,654	--
Olympic 8/	--	--	--	--	--	--
R. River	156,017	76,086	--	1,698	233,801	--
Siskiyou	179,606	52,571	--	5,906	238,083	3,804
Siuslaw	123,158	25,115	24	--	148,273	604
Umatilla	122,911	3,091	--	--	126,002	--
Umpqua	176,322	20,169	--	--	196,491	--
W-Whitman 8/	--	--	--	--	--	--
Wenatchee	93,695	10,394	--	79	104,168	200
Willamette	318,298	131,947	--	--	450,245	--
Winema	65,193	25,186	--	--	90,379	--
TOTALS	2,338,176	697,199	993	17,722	3,053,097	133,485
	(77%)	(23%)	(.03%)			

1/ As required by Regulation 36 CFR 223.10, the data was reported by bidder of national forest timber sales during 1981 for the previous years disposition of national forest timber harvested and private timber exported.

2/ National forest timber processed domestically by bidders of national forest timber.

3/ National forest timber sold by bidders of national forest timber to a domestic buyer.

4/ National forest timber sold by bidders of national forest timber to a domestic buyer who could not have purchased timber directly.

5/ National forest surplus timber sold by bidders of national forest timber to be exported.

6/ Total national forest timber included in the sample. (Total of 2/, 3/, 5/)

7/ Private timber exported or sold for export by bidders of national forest timber sales.

8/ No records available.

Mr. PETERSON. Well, I could summarize very briefly what is stated in the report. It indicates that the reporting that was instituted as a result of the direction in the 1981 appropriations bill finds that the value of logs purchased from or sold to third parties and possibly substituted for exported private logs is not significant.

We think it is less than one-tenth of 1 percent.

Mr. DICKS. As I recall, the earlier figure we had was one percent. Now, are you saying it is less than one-tenth of one percent.

Mr. PETERSON. Right.

Mr. DICKS. That is the amount of the so-called indirect substitution?

Mr. PETERSON. Right.

Now, the new reporting system has disclosed a few violations where it was substituted for private timber. We are following up in each one of the cases to find out whether, in fact, there were contractual violations. So I believe the reporting has been effective and it has substantiated our earlier judgment that this was not a significant problem.

Mr. DICKS. So, where you find a situation where your reporting indicates a violation, you are following up on it. I hope this is widely known within the region.

Mr. PETERSON. It is public information, sir, and we have made it known through associations and meetings and such that we would be doing this.

Mr. DICKS. As you know, many on this committee believed that the existence of a reporting mechanism would serve as a deterrent to those who might attempt third-party substitution. From what you have told us, it sounds as if that is working.

Mr. PETERSON. We believe it is; yes, sir.

Mr. AUCOIN. Would the gentleman yield to me?

Mr. DICKS. Yes, I yield to you.

LOG EXPORT POLICY

Mr. AUCOIN. I appreciate the gentleman exploring that issue at this time in the hearing because the subcommittee gave a great deal of attention to that a year ago as the Chief and Mr. Crowell know.

This line of questioning raises in my mind one question I wanted to pose to Mr. Crowell.

With the domestic market for lumber in a depression state and given most observers doubts about the future of that market, at least in the foreseeable future, is the Administration giving any consideration as it prepares for these ever increasing levels on timber sales to changing what has been the past policy on log exports?

Mr. CROWELL. No, we haven't given any consideration to that at all.

Mr. AUCOIN. Is it reasonable to believe that the Administration may be examining that policy?

Mr. CROWELL. At sometime in the future it is possible but there aren't any plans to do that currently. I have no plans for initiating such a review.

Mr. **AuCoin**. Has any consideration of that type of policy change taken place in the preparation of this year's first installment on what you have indicated would be an annual increase in timber sales level?

Has any consideration been given to that possible policy change on log exports?

Mr. **Crowell**. No.

Mr. **AuCoin**. None whatsoever?

Mr. **Crowell**. No.

Mr. **AuCoin**. And you don't imagine that changing?

Mr. **Crowell**. Well, I can imagine it changing but there are no plans afoot to review the policy. The policy has been in place for a dozen or 14 years and was put in place after a great deal of political turmoil. I hadn't really thought about the possibility that maybe those political considerations have changed any.

I don't really think they have, now that you have asked the question.

Mr. **AuCoin**. So you think the current policy is sound?

Mr. **Crowell**. Well, it is politically workable.

Mr. **Dicks**. Based on the hearings and regulations, is it your recommendation that we leave your existing policy regarding third-party substitution as it is?

Mr. **Peterson**. Yes, sir; that is our recommendation.

Mr. **Dicks**. Do you agree with that, Mr. Secretary?

Mr. **Crowell**. Yes.

Now, I might say, frankly, I don't know quite what you are leading up to.

Mr. **AuCoin**. I am not leading up to anything.

Mr. **Crowell**. All policies are subject to change because of changing circumstances.

Mr. **AuCoin**. I have nothing in mind other than looking at the existing domestic market, and I am not very sanguine about the future, and I am wondering if some change in log exports, be it third-party substitution or something else, is contemplated as you are increasing timber sales levels?

Mr. **Crowell**. No, the increasing timber sales——

Mr. **AuCoin**. You don't have to repeat all that.

Mr. **Crowell**. I know I don't but that is all designed to meet what we anticipate will be domestic needs.

Mr. **AuCoin**. So you really flatly rule out any policy change in the foreseeable future?

Mr. **Crowell**. No, I don't rule it out. Nothing can be ruled out in the real world. But in responding to your earlier questions, I was saying that we hadn't given any consideration to the changing of policy or proposing a change in the policy up until now.

Mr. **AuCoin**. I understand that. Thank you.

CIRCUMSTANCES CAUSING POLICY CHANGES

Mr. **Dicks**. Let me ask this question. Can you see any circumstance under which a change might be necessary?

Mr. **Crowell**. I could imagine circumstances, yes.

Mr. **Dicks**. What might those be?

Mr. CROWELL. Well, one circumstance might be that we find a need to increase our exports very considerably in order to pay for imports. Oil would be a good example of what we might have to pay for.

Now, realize I am just indicating what is possible in response to your question.

Mr. DICKS. Do you understand that we are talking about Federal lands—either Forest Service or BLM?

Mr. CROWELL. Yes, I understand.

Now, if as a result of national policy decision to increase exports we began to look around for what could be exported, it would be possible to identify wood as something that we could contribute to the world markets, just as we contribute food to the world market.

We have a tremendous capability in this country for producing wood, just as we do for producing food. So it is conceivable that the United States could some day be the "wood basket of the world" because of our capabilities for growing wood and also because of our economic climate.

Under that sort of a circumstance I can imagine that the policy of log exports could some day be considered for change.

Mr. AUCOIN. It sounds to me like that is a pretty complete answer for an official who hasn't given any thought to the prospect.

Mr. CROWELL. Well, I have lived with this prospect for 14 years, Congressman.

Mr. DICKS. However, at this time you are not recommending anything.

Mr. CROWELL. No.

JAPANESE TIMBER MARKET

Mr. DICKS. I liked your first answer better—that you can live with the situation as it is.

I would like to ask a few more questions and then we will break for lunch.

First, what is the condition of the Japanese market at this time? Last year, as I recall the overall imports were down from about 3 billion board feet to 1.5 billion board feet. Is that market changing at all?

Mr. CROWELL. It is still lousy, just as ours is. I think the Chief has some figures to put in the record.

Mr. PETERSON. The total softwood log export was 2.4 billion board feet which is 24 percent below the volume exported in 1980.

Mr. DICKS. What was 2.4 billion board feet?

Mr. PETERSON. Total log export. It has got to be private. Shipments to Japan dropped approximately 25 percent between 1981 and 1980 to a new total of 1.8 billion board feet.

CANADIAN TIMBER MARKET

Mr. DICKS. Now, tell us what the situation is with the Canadians. As you know, one of the more significant issues in the Pacific Northwest concerns Canadian undercutting of the price of U.S. timber.

There is a belief in the Pacific Northwest that the Canadians can reduce their stumpage prices and thus gain a competitive advantage in the United States. Is this belief well founded and what can be done to solve this problem.

Mr. Crowell. The Canadians do apparently have contractual arrangements with their purchasers which allow stumpage prices to decline in response to market conditions.

Mr. Dicks. Do we have anything similar to this in the United States?

Mr. Crowell. We do have something similar to that in our stumpage rate adjustment sales. That is the form under which we make most of our timber sales. However, that form of contracting has not been in place on the west side of Oregon and Washington. I guess it is in northwestern California and the so-called east side of Oregon and Washington, Region 6, where we have had sales made with stumpage rate adjustments.

Mr. Dicks. Why is that?

Mr. Crowell. Mostly because of the industry preference for it. Back in the sixties, the Forest Service did try a stumpage rate adjustment contract in that area, in that sub-region, but there were difficulties in developing an index which is crucial to making stumpage rate adjustment sales possible to make it work right.

The index was difficult to develop because of the variations in products made from a species grown and harvested on the west side particularly. Lumber and plywood prices did not move in synchronization and so the index, even though it was a weighted index, frequently resulted in price changes that distorted the condition of certain markets. So with that problem, the Forest Service agreed, back about 1964 or 1965 as I recall, to drop stumpage rate adjustments in response to the request of the majority of producers on the west side.

Mr. AuCoin. But now, Mr. Crowell, you have overcome that problem prospectively even on the west side in Region 6 with your 11 point program.

Mr. Crowell. Two more points to make in response to this question.

The existence of flat rate sales contributed significantly, in my opinion, to the high prices that were bid for timber sales which are now inoperable out of that 10 billion foot volume that we talked about earlier.

The other point that you have anticipated, Congressman AuCoin, is that, as part of the nine points that we have come forward with in changing contract procedures, we are now proposing that stumpage rate adjustment sales be reimplemented on the west side on a trial basis. Really, it is an indefinite trial.

We are going to put it into effect about a year from now after we have made an effort to develop and test appropriate indexes. Our people are pretty confident that they can develop an appropriate index. That remains to be seen.

If the test of the index doesn't work out, we may have to go back and look at that to propose stumpage rate adjustments on the west side again.

ITC HEARINGS ON THE CANADIAN ISSUE

Mr. DICKS. As I understand it, the ITC held hearings in Oregon on this issue. Are you aware of those hearings and if you are what was concluded at them as it relates to the Canadians?

Mr. CROWELL. Yes, I guess we didn't quite finish our answer to your question.

Mr. DICKS. I yielded to my colleague.

Mr. CROWELL. The Canadians did have the capability of responding to market conditions by reducing stumpage prices, and as a consequence of that, they seemed to have captured a larger share of the U.S. domestic lumber market than they had previously experienced largely because they displaced lumber that was coming from western Oregon and western Washington.

We have had our research people take a look through one of their computer program models and the results of that indicate pretty clearly that with the kind of adjustments or changes that we anticipate that our west side producers are going to be able to recapture some of that market almost totally at the expense of Canadian producers.

It won't be at the expense of other producers in the U.S. That is what the model shows.

Now, the response for that, I think, is that Canadian producers have higher costs except for stumpage than our operators do and if you equalize stumpage or bring them more into equalization, well, then, domestic operators are able to compete very effectively as you would expect for the domestic market.

Mr. DICKS. In reviewing last year's record, it was pointed out to me that the Canadians make demands on their producers that go beyond the demands that we make on manufacturers in this country and, therefore, even though their stumpage prices may be lower you can't compare it just on that basis. You have to add in all the other things that are expected.

COMPARISON OF U.S. AND CANADIAN SITUATIONS

Now, the question that we have to answer is, Is it possible for one to make that kind of a comparison and if so, what are the results of it?

Mr. PETERSON. There have been several attempts to make such a comparison. In order to make a valid comparison you have to look at the total cost of production, the total tax structure in the two different countries. You would have to look at who is responsible for reforestation, who is responsible for road construction, who is responsible for other things and how is that reflected in stumpage?

For example, our stumpage prices in the United States assume the roads are built, already there. They assume the roads are there and the roads are deducted from that price. That is one adjustment you have got to make immediately to even get the road part of it right.

So, it would be fairly difficult to make a good technical kind of analysis. We have tried to do it in this model we have.

I do have a record here of what actually has happened between the United States and Canada between 1970 to 1981.

Mr. DICKS. Let's put a copy of that in the record.

[The chart follows:]

U.S. softwood lumber production, imports, exports,
and apparent consumption, 1970-81
(million board feet)

Year	U.S. production	Imports		Exports		U.S. apparent Consumption
		Total	From Canada	Total	To Canada	
1970	27,530	5,778	5,722	1,115	203	32,193
1971	30,039	7,232	7,172	933	206	36,338
1972	30,975	8,985	8,878	1,191	290	38,769
1973	31,586	9,020	8,844	1,753	388	38,853
1974	27,704	6,821	6,732	1,566	382	32,959
1975	26,747	5,724	5,677	1,405	397	31,066
1976	29,878	7,959	7,913	1,606	438	36,231
1977	31,203	10,370	10,327	1,428	366	40,145
1978	31,273	11,853	11,777	1,354	374	41,772
1979	30,411	11,153	11,101	1,781	428	39,783
1980 1/	24,335	9,573	9,546	2,007	388	31,901
1981 1/	22,710	9,029	9,008	1,861	495	29,878

1/ Preliminary.

Sources: Production--U.S. Department Commerce 1970-79, National Forest Products Association 1980-81. Imports and Exports, U.S. Department of Commerce.

CANADIAN STUMPAGE PRICES

Stumpage Price Comparisons between Canada and the United States

The United States International Trade Commission in April 1982, provided the Senate Committee on Finance a report on Investigation No. 332-134 titled "Conditions Relating to the Importation of Softwood Lumber into the United States." The following extract from pages 52 and 53 of that report provides a summary of stumpage price comparisons for Pacific Northwest Region of the Forest Service (Region 6--Washington and Oregon) and British Columbia for the period 1977 through 1981.

Stumpage prices.--A summary of the stumpage prices paid on Region 6 timber sale contracts and on Tree Farm Licence (TFL) and Timber Sale Harvesting Licence (TSHL) cutting permits in British Columbia is shown in the following tabulation (per 1,000 board feet):

Year	Region 6			British Columbia		
	Westside	Eastside	Average	Coastal	Interior	Average
1977	US$113.50	US$89.64	US$106.26	US$15.82	US$5.91	US$9.14
1978	131.90	106.32	124.36	22.56	22.82	22.73
1979	140.69	123.28	135.53	47.68	34.69	38.84
1980	138.55	94.43	125.36	66.25	18.83	32.76
1981 1/	137.64	101.86	126.02	21.39	6.94	11.38

1/Region 6's 1981 figures are on a fiscal year basis. Canadian figures are preliminary.

In the above comparison, it is apparent how much more responsive to changing market conditions British Columbia stumpage prices are than Region 6 stumpage prices. The difference is best seen by comparing the price change in the British Columbia interior and Region 6 westside during 1979-81.

British Columbia interior stumpage prices decreased 80 percent from 1979-81, but Region 6 westside prices declined by only 2 percent. In general, the method of selling stumpage in British Columbia is more responsive to market price changes than the majority of Region 6 sales.

Before adjusting the stumpage prices for species differences, an additional credit must be deducted from both the Region 6 and British Columbia figures. The Region 6 figures include credits for "sale area betterments" of about 14 percent in 1981, and the British Columbia figures include road credits of about 34 percent of the stumpage price in 1981.

Year	Western (coastal)		British Columbia as a share of Region 6	Total		British Columbia as a share of Region 6
	Region 6	British Columbia		Region 6	British Columbia	
			Percent			Percent
1977	US$102.15	US$16.70	16	US$95.63	US$13.35	14
1978	121.35	22.24	18	114.41	26.64	23
1979	126.62	60.43	48	121.98	67.12	55
1980	120.54	54.66	45	109.06	47.84	44
1981 1/	118.37	18.35	16	108.38	10.82	10

1/Region 6's 1981 figures are on a fiscal year basis.

Key differences between stumpage prices on Region 6 and British Columbia timber are highlighted below:

-Adjusted for currency, species, and road costs, average 1981 British Columbia stumpage prices are about one-sixth roughly comparable Region 6 stumpage prices.

-In better market years, 1979 in particular, British Columbia stumpage prices are about one-half that of Region 6 prices.

-British Columbia stumpage price adjustment have allowed stumpage payments to react to recent poor end-product markets. Region 6 prices have remained relatively high.

-Before any definitive conclusions concerning competitive conditions are drawn from stumpage comparisons, both harvesting and transportation costs to the mill should be considered. These costs can vary both within the United States and Canada and between the two countries. Generally, when comparable market log prices are available, they serve as a better indicator of a producer's relative raw material cost than do stumpage prices.

1/ It is important to note that differences in grade have not been included and some administrative costs are included in Region 6 figures (not believed to be more than $20 per 1,000 board feet stumpage). Also, when comparing stumpage prices, other substantial costs (such as the physical process of harvesting and delivering the trees to the mill) must be considered when figuring total wood costs for mills on both sides of the border.

Mr. PETERSON. What we expect to import from Canada from 1980 to 1981 is down from 1978 and 1979.

Mr. DICKS. Is that because the market is depressed?

Mr. PETERSON. Yes. Because the market is so depressed in both the United States and Canada you are finding increasing competition for a smaller market. So everybody is competing for that much smaller market. The part of the United States that Canada is able to compete with is the Pacific Northwest area.

Mr. DICKS. Mr. AuCoin and I know that area very well.

Mr. PETERSON. But the indications are if the demand picks up in the United States and Canada, that problem will largely disappear.

Mr. DICKS. We understand that.

We are concerned about getting through this crisis period and hoping that a situation will not develop where the Canadians are able to take a bigger share of this market because of the flexibility that they have in contracts which allow lower stumpage prices. If this occurs, I believe that we have a responsibility to act to equalize the price so that we are not put in a competitive disadvantage especially at a time of considerable stress in the industry.

Does that make any sense?

Mr. PETERSON. I don't think either Mr. Crowell or I have seen the report of the International Trade Representative and I think we would want to see that before we made any further judgments.

Mr. DICKS. Mr. Crowell, you are very knowledgeable in the industry. What do you think?

Mr. CROWELL. I have seen a summary of the report and because of the factors the Chief referred to, the complexities of making a judgment about who has what advantage, it is pretty difficult to draw clear conclusions about whether or not there ought to be some sort of protective tariff imposed.

I really am optimistic, as a result of what the Forest Service model shows that with adjustments in our methods of selling Federal timber, that we are going to be able to recapture that portion of the market and restore the traditional balance which has existed competitively between the U.S. western producers and Canadian western producers.

Mr. DICKS. I am told that the Canadians violently disagree with the perception in the United States that their cost, of doing business are less than the costs of doing business in the United States.

Mr. CROWELL. Their costs of doing business are, in some respects, lower. Their stumpage certainly has been lower during this downturn than the stumpage rates that were bid by some of our producers. But some of their other production costs are higher.

The complexities are also there because of the exchange rate. It is a favorable one to the Canadians.

I think there is a 17 percent difference right now and their transportation arrangements may be different. They have Government-owned railroads and so on. So that can enter into it as well.

So, as I say, I am hopeful that when we get our revised contract procedures working and see a restoration of the economy that we will see this Canadian share of the market recede somewhat.

Mr. DICKS. I yield to Mr. AuCoin.

Mr. AUCOIN. The problem Mr. Dicks and I have is, what happens before the market recovers? What we are dealing with here is an intense struggle between the Canadian interests and west side operators in Washington and Oregon for the few crumbs that may remain in the market.

That is the critical question. I think most of us recognize that as the whole market rebounds and grows, it is going to take the pressure off the general situation, but a lot of people aren't going to last in the meantime.

Mr. CROWELL. Well, that is one of the reasons why we put into effect this accelerated program or emergency program with short-term small-volume sales. It was to allow some of those western producers to acquire some timber supplies with stumpage rates that could compete with the Canadians.

And as I said earlier, I think that has worked quite well.

Mr. AuCOIN. The report that you indicated that you read, John, was the ITC summary?

Mr. CROWELL. Yes, the summary.

Mr. AuCOIN. Not the Special Trade Representative?

Mr. CROWELL. No, the summary.

Mr. DICKS. Would you provide a copy of this for the record?

Mr. CROWELL. Yes.

[The information follows:]

SPECIAL REPORT
NATIONAL FOREST PRODUCTS ASSOCIATION
1619 Massachusetts Avenue N. W., Washington D. C. 20036

April 23, 1982

U.S. INTERNATIONAL TRADE COMMISSION REPORT

SUMMARY*

"Conditions Relating to the Importation of Softwood Lumber into the United States"

On April 21, the U.S. International Trade Commission released its analysis of imports of Canadian softwood lumber by the United States and the competitive status of the U.S. and Canadian lumber industries. The study had been requested by the Senate Finance and House Ways and Means Committees in December, 1981.

The key conclusions of the report are as follows:

1. Imports of lumber from Canada have increased from 19 percent of U.S. consumption in 1975 to 30 percent in 1981.

2. The average exchange rate (U.S. dollar per Canadian dollar) has declined from 1.01 in 1972 to 0.83 in 1981, thus giving Canadian producers an increasing advantage in pricing lumber in the U.S. market.

3. In Canada, 90 percent of the commercial timberland is publicly owned. In the United States only 28 percent is publicly owned, except in the western United States where the publicly owned share is 68 percent.

4. The appraisal system for sales of timber from government lands is similar in both countries. In Canada, buyers licensed to purchase on public lands pay the appraised price. In the United States, the appraised price becomes the minimum basis for competitive bidding.

5. The supply of timber provided from public lands in Canada is more than sufficient to meet industry's productive capacity. However, in the United States the supply of timber from government lands has been held fairly constant, resulting in intense competitive bidding and sharply increased prices for stumpage in the West in recent years.

6. After appropriate adjustments for species mix and currency (all monetary comparisons are in U.S. dollars) the average price for coastal British Columbia (B.C.) stumpage in 1981 was one-sixth that of Oregon and Washington stumpage — $18 vs. $118. In better years, e.g. 1979, B.C. prices were roughly half of U.S prices — $60 vs. $127.

7. However, when actual log prices are compared, the difference is smaller. The 1981 adjusted price of logs sold in Vancouver appears to be about 25 percent below the average price in the U.S. Pacific Northwest. In better years the difference appears to be about 15-25 percent.

8. Variable costs — delivered wood and wage costs — are lower in Canada than in the United States. Note average and regional comparisons on other side.

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*Prepared by the International Trade Division of the National Forest Products Association.

	Costs in U.S. Dollars Per 1,000 Board Feet		
	U.S.	Canada	Difference
U.S./Canada (average)			
Delivered Wood	173	146	27
Wages	142	151	(9)
Maine/Quebec			
Delivered Wood	155	93	62
Wages	134	123	11
Idaho-Montana/Interior British Columbia			
Delivered Wood	148	77	71
Wages	86	112	(26)
Oregon-Washington/British Columbia			
Delivered Wood	205	138	67
Wages	108	123	(15)

9. Fixed costs appear to be higher in the United States, partly due to U.S. companies' ownership of timberlands.

10. Transportation costs are generally somewhat higher in the United States, mainly due to the U.S. regulatory environment (e.g. rail regulations, the Jones Act). Recent changes in U.S. regulations may make the United States more competitive.

11. The effect of taxes appears to be similar in both countries.

12. Marketing practices by both Canadian and U.S. companies are the same. Price competition is intense, with British Columbia mills often appearing to be the price leaders on 2" x 4" lumber in the U.S. market.

13. Prices of softwood lumber shipped to a third country, specifically Japan where the mix is believed to be similar, from the United States and Canada have been markedly comparable in the last five years — e.g. $347 vs. $351 for the U.S. and Canada in 1981.

14. Government policies to promote or assist industries to strengthen the tax base and encourage employment in certain states or provinces exist in both countries.

Copies of the ITC study can be obtained from NFPA's International Trade Division, 1619 Massachusetts Avenue, N.W., Washington, D.C. 20036, telephone (202) 797-5820.

THE ITC REPORT

Mr. **AuCoin**. I read a clipping yesterday, from a northwest newspaper in which Senator Packwood is noted as having said that his reading of that report suggested that any American operators who might want to press, through the Special Trade Representative or whatever the procedure is, for countervailing duties would have an ample record on the basis of what the ITC uncovered to do so.

Do you disagree with Senator Packwood on that?

Mr. **Crowell**. I am not in a position to draw a conclusion about that. I think what he did say when he put the report in the Congressional Record was something to the effect that now that this information was available, he would encourage effective American producers further to explore the possibilities of relief.

MOUNT ST. HELENS TIMBER

Mr. **Peterson**. Not to interject another subject in this but, it would help right now if we could move the balance of Mount St. Helens timber to market.

As you are aware, we got a request from two subcommittee chairmen and most of the Washington delegation in the House to hold up on those sales.

Mr. **Dicks**. Would you expand on that, please?

Mr. **Peterson**. Congress is in the process of deciding boundaries of the national volcanic area, and we have had requests from Members to hold up on all salvage timber sales within the area being considered for designation.

Mr. **Dicks**. On going in and taking the blown down——

Mr. **Peterson**. On making the sales, period.

Additionally, we have a request from Senators Jackson and Gorton on the Senate side and most of the Washington House delegation to hold up on the 21 sales.

All I am pointing out is it would be helpful if we had a congressional resolution of that boundary. In addition to the congressional concerns, most of the same sales have been appealed by people as saying, "We think you ought to wait until Congress gets through."

The purpose of the appeal was to delay for the Congress to make that decision. In the meantime, the timber is deteriorating and it could provide some raw material that would be helpful for people in the Pacific Northwest right now.

Mr. **Dicks**. I want to go back to one thing now to make sure it is clear for the record.

ADDITIONAL THIRD PARTY SUBSTITUTION DISCUSSION

On the question of third-party substitution, you submitted a letter on March 3, 1982, which describes the regulations that have been imposed, the reporting requirements, and states that the extent of third party substitution is less than one-tenth of 1 percent?

Is that correct?

Mr. **Peterson**. That is our best estimate of the amount that would be involved.

Mr. Dicks. And that is down from the 1 percent you estimated last year. Is that correct?

Mr. Peterson. We gave you an estimate of 1 percent. The reporting indicates it is less than that.

Mr. Dicks. Where your reporting indicates violation of the third-party substitution rules, are you aggressively and vigorously try to remedy the situation?

Mr. Peterson. Yes, we do.

Mr. Dicks. We will break until 1:30.

FISH AND WILDLIFE SERVICE FIRE PROBLEMS

Mr. Yates. Let's turn to another subject which was touched on by you, Mr. Crowell. It is policy, not specifically for your organization, but for the Fish and Wildlife Service, as that relates to fires.

I visited Merritt Island, and I don't know why the Fish and Wildlife Service doesn't take advantage of your Boise operation. They were there after the fire last year. Remember, we had the hearing on the fire. I went down there about 10 days ago, and I must say, they are totally unprepared for fires again.

They have a helitorch that can burn maybe 16,000 acres a year, but they don't have any people who are trained to fight fires. I am told the reason they are not trained is the Fish and Wildlife Service doesn't let them use travel money to go to training sessions.

The only place I guess they could be trained is at one of your operations? You are the only ones who know how to fight fires, am I right?

Mr. Peterson. There are several kinds of training. The one in Arizona for fire overhead is most efficiently conducted there. Now we do, for our own use, provide some on-the-ground training by our local forests, using some regional office people and sometimes coordinated with the State.

Mr. Yates. Is Boise in a special class by itself? Boise is the headquarters, isn't it?

Mr. Peterson. Boise is an interagency fire center which, among other things, helps develop standards for training.

Mr. Yates. If it is interagency, is the Fish and Wildlife Service one of the Agencies?

Mr. Peterson. Yes, sir, they are.

Mr. Yates. How recently did they become affiliated with this?

Mr. Peterson. The Fish and Wildlife Service has been served, I guess that's another way of saying it, by the interagency center for a number of years in terms of getting crews and supplies and so on.

I believe, though, that the Fish and Wildlife Service did not adopt training standards for people until last year.

Mr. Yates. I don't think they have adopted them yet, have they?

Mr. Peterson. I understand they had adopted them last year. I am not sure.

Mr. Yates. Who in your operation is in charge of this? Ray, do you know what the Fish and Wildlife Service has done? I get the impression they haven't done anything. They haven't any class 2 or class 3 fire bosses.

Steve Vehrs, the Director at Merritt Island, said he had more training than anybody else, and he doesn't qualify.

This is a particularly fire-susceptible area, because it is the area in the United States that has more lightning strikes than any other. The palmetto brush that is prevalent on the island apparently has some kind of inflammable vapor surrounding it which is ignited by lightning strikes.

We had two people burned to death there last year, as you know, and I am afraid that the same thing is likely to happen again if they fight the fires. They can't let the fires burn out of control, because of the NASA project there on the island.

I am leading up to the question as to how we can persuade the Fish and Wildlife Service to undertake the recommendations made by your outfit.

Mr. LEISZ. Mr. Chairman, the other Interior agencies, the National Park Service and the Bureau of Land Management, do participate in the training at Marana, which provides formal training for fire boss qualifications.

Mr. YATES. What is a fire boss? I don't think Vehrs is a fire boss and,that is the lowest grade, isn't it?

Mr. LEISZ. No.

Mr. YATES. As I remember, he said nobody on his staff qualifies as a fire boss.

Mr. LEISZ. This is a tough qualification to meet.

Mr. YATES. That is the toughest?

Mr. LEISZ. Yes, sir. This is the person who is in charge of the entire fire operation. The one who comes in and is the Commander-in-Chief of that operation and is responsible for the planning, execution, safety of personnel, balancing between expenditure and funds, the resources at stake, and provides for fire fighter safety, so they need intensive training.

The Agencies between the Department of the Interior and the Department of Agriculture have adopted standards for uniformity in training and that has worked very well for the Agencies.

I suspect it may be that Fish and Wildlife Service, due to the frequency of their interface with fire hasn't given them quite the need or importance for fire suppression as some of the other Agencies, because the Park Service, the Bureau of Land Management and the Forest Service have more fire activity overall.

But they do have some serious problems and I know that Florida is one of those.

Mr. YATES. I am worried about what is going to happen in June.

I am wondering why they don't call on you to make preparation for meeting the contingencies. They have 13 people on that refuge, none of whom qualify for your class 1 or class 2.

I don't think any of them is a fire boss and yet the fires are going to be there. They are going to be called on to fight them. They don't have the tractors that they say they need in order to fight them.

They may be able to hire a helicopter to review or a small plane to review, which is one of the recommendations that you made last year, to have somebody up above to see what has to be done, but that is the situation.

It isn't your responsibility and the thing that gripes me is they don't think it is their responsibility, either, because they are not preparing for it.

Now, how do I marry you and the Fish and Wildlife Service? How do I get you together so that somebody takes the steps necessary to protect the personnel that are going to have to do the firefighting?

Mr. Leisz. There are two elements. One is management and the second is training.

Mr. Yates. Can you train them in that time?

Mr. Leisz. That would be difficult to do.

Mr. Yates. Well, they have had a year to do it. Now they are up against it.

Mr. Peterson. Mr. Chairman, I would be happy to talk to the Director of the Fish and Wildlife Service to see if there is anything that we might do in terms of cooperating.

Mr. Yates. Do you have any stations down in that area?

Mr. Peterson. Yes, sir, we have three National Forests in Florida and it is possible that we could—

Mr. Yates. Well, you brought in equipment all the way from Idaho last time.

Mr. Peterson. Right. It is possible that we could invite some of the people to our training session. We have a contingency plan that we can look at and there is a State action plan in Florida today.

Mr. Yates. Is it possible to alert trained people so that they may know they may be called to help on Merritt Island or something like that?

Mr. Peterson. This is something I will check with the Director so that he is aware of that. Their real problem is that they have a small number of people at each location. Many of them are seasonal, but they have a relatively small number of people at each location.

Some years ago, there was a major fire problem, so it is very difficult to staff sufficiently.

Mr. Yates. You say they not only need the helitorches, but they need tractors and things of that sort. Do you have tractors?

Mr. Peterson. I would not think we would have a tractor we could assign. They would probably have to contract for that.

Mr. Yates. They had a tractor they got from the Navy, which they said was too light to do the work.

Mr. Peterson. I will check into that and let you know.

Mr. Yates. Lay out some kind of a program for protecting people who are working there.

I think our staff is looking at the possibility of establishing a fire training school down there in that area. You don't have many in that area, do you?

Mr. Peterson. We have the capability of training people there, using some of our existing facilities.

Mr. Yates. Should there be a fire training school down there?

Mr. Peterson. I would suspect not.

Mr. Yates. There isn't enough of a call for it?

Mr. Peterson. It would cost a lot of money to support a major facility. It would probably be much cheaper to take the people to the location and train them and rent commercial facilities for the length of time they are there rather than to build Goverment facilities. Possibly we may be able to use facilities that are already available from the State of Florida.

We have made a mistake in the past in building big training facilities that then become white elephants to try to support. We also have to staff them adequately. So we do not favor a lot of fire training facilities. You need trained people to do the job for every facility.

QUERY OF MR. BUCKMAN'S FOREIGN TRIP

Mr. YATES. I suppose inasmuch as Mr. Buckman is not going to be with us during the rest of the hearing, we ought to ask our research questions now.

Where are you going? Are you going on a vacation?

Mr. BUCKMAN. No, sir.

Mr. PETERSON. He has only explained this about 20 times, including once to me.

Mr. YATES. Where are you going, Dr. Buckman?

Mr. BUCKMAN. Mr. Chairman, I am an officer in The International Union of Forestry Research Organizations that arranged its schedule to accommodate my needs, and we wound up with a head-on conflict between the Appropriations Committee and the meeting in Europe. I will be in Yugoslavia.

Mr. YATES. Which won?

Mr. BUCKMAN. The International Union of Forest Research Organizations and the Appropriations Committee.

Mr. YATES. I can see why you are so successful.

Do you want to comment on Mr. McDade's gypsy moth problem?

GYPSY MOTH PROBLEM

Mr. McDADE. You don't mean to tell me you are going to Yugoslavia while those gypsy moths are still here, are you? Ain't no way you are going to do that.

Mr. YATES. He is going to do some research on it.

Mr. BUCKMAN. That is not so farfetched, Mr. Chairman. One of the important things for the control of gypsy moths is to find the parasite and predator complexes that keep gypsy moths in relatively low population in Europe and Asia.

Mr. YATES. Are they lower there?

Mr. BUCKMAN. Yes, sir, they are, because parasite and predator complexes, that is, insects and other organisms help keep the gypsy moth under control.

Mr. YATES. Why can't we do that here?

Mr. BUCKMAN. We are doing it, Mr. Chairman.

Mr. YATES. Well, then, why is Mr. McDade so upset?

Mr. BUCKMAN. One of the important control strategies for gypsy moths, Mr. McDade, is to search out the parasites and predators that attack the gypsy moth.

Mr. McDADE. How long have we been doing that?

Mr. BUCKMAN. We have been doing it for some time.

Mr. McDADE. We were going to have white mice and wasps and all this.

Mr. YATES. He was saying they have been able to do it in Europe. I am trying to find out from them if they have been able to do it in Europe——

Mr. McDADE. Because the scientists at Harvard imported the gypsy moth back about 1900 to make it spin silk more quickly and they knocked over a gypsy moth tray and gypsy moths have no natural predators in this country.

Mr. BUCKMAN. There are some natural predators and parasites, but not nearly enough.

Mr. YATES. Well, what can we do? We want to make Mr. McDade happy. How do we do it?

Mr. BUCKMAN. Mr. Chairman, there are some parts of Europe and Asia where systematic searches for parasites and predators have not been completed. This year, we have an expedition in the People's Republic of China, an area that we have not collected in before, we hope they will bring back some effective parasites and predators.

Last year we collected in the Ukraine, and these are two areas that had not been researched before.

Mr. YATES. What does this mean? I gather from your previous answer that they had met with some success with the predators that they were using?

Mr. BUCKMAN. The gypsy moth is native and these parasite and predator complexes have built up over thousands of years.

Mr. YATES. Then we have to wait?

Mr. BUCKMAN. We have to introduce them here.

Mr. YATES. And wait for thousands of years.

Mr. BUCKMAN. I hope not, sir.

Mr. McDADE. What are you going to do this summer besides go to Yugoslavia?

Mr. BUCKMAN. We have redirected some of our research programs back into gypsy moths because of the signals that all of us are getting. We are converting the mission of our Hamden, Connecticut laboratory into biological controls of gypsy moths.

We think we have gone about as far as we can with chemicals and we need now to work with biological controls, parasites and predators, viruses, and silviculture control methods.

Mr. YATES. What are you going to do about Pennsylvania?

Mr. McDADE. What are you going to do this summer? I didn't hear your answer to that.

Mr. CROWELL. I am afraid I answered that this morning, Mr. Chairman, maybe not to your satisfaction.

Mr. McDADE. Do you have any better report after lunch?

Mr. CROWELL. We don't have anything better to put on your platter this afternoon.

Mr. McDADE. Well, I may put a few things on your platter, pal.

Mr. CROWELL. I am aware that I am running that risk.

Mr. McDADE. You don't seem to be very concerned about it. Have you talked with anybody at lunch about it?

Mr. CROWELL. Not at noontime today. You said you wanted to see me after the hearing, and I agreed to do that and talk about it.

Mr. McDADE. I didn't say after the hearing. I said I thought that you might like to reconsider your position at noontime, but I would be glad to talk with you after the hearing.

Mr. CROWELL. I would be glad to do that.

Mr. YATES. What is Mr. Buckman going to do this summer?

Mr. McDADE. He is going to bring us some more white mice.

Mr. **Buckman**. Parasites and predators.

Mr. **McDade**. White mice and wasps.

PARASITE AND PREDATOR CONTROL OF INSECTS

Mr. **Yates**. Are you concerned that the predators that you bring back may not have the same effect on the forest that the gypsy moth does?

Mr. **Buckman**. The parasites and predators, of course, will go after the larvae of the gypsy moth, and I am sure that some of the introductions will not be successful. Some, we hope, will be.

Now, we have a very successful example, Mr. Chairman, where the introduction of parasites and predators did bring a major insect under control and this happened within the past 10 years or so.

The Larch casebearer is an insect that defoliates and it was introduced 10 or 12 years ago. We went to areas where the insect is native and I think that was in Siberia and Russia.

We collected the parasites and predators and those same parasites and predators now are making the Larch casebearer a relatively minor pest.

Mr. **Yates**. You can't use the same ones on the gypsy moth?

Mr. **Buckman**. No.

Mr. **Yates**. Well, Joe, I tried.

Mr. **Regula**. I just noted the other day that the locusts are appearing on their 17-year cycle. Have you gotten involved in that issue?

Mr. **Buckman**. We haven't, Mr. Regula. They tend to be agricultural and urban pests and we haven't been involved.

Mr. **McDade**. Well, you are the in-house expert on gypsy moths?

Mr. **Buckman**. I may be.

Mr. **McDade**. Well, everyone has testified that in the absence of predator control they would use chemical suppression methods to protect the timber base. Do you agree that that is the procedure that ought to be followed?

Mr. **Buckman**. I think, Mr. McDade, that one needs to do some kind of a cost-benefit analysis and if the benefits outweigh the costs, then yes, sir, we ought to use those techniques.

Now, I suppose we have four or five chemicals that are effective against the gypsy moths. We are also confronted with spiraling cost of application and so, that cost-benefit analysis changes as we go through the years.

I know that if gypsy moths get into my backyard, I want some chemical sprays until the time that the predators are effected.

Mr. **McDade**. Yes, sir, everybody does.

Mr. **Yates**. What chemical do you use?

Mr. **McDade**. Sevin. That is the only approved chemical. If the spraying doesn't occur timely while they are in incubation, then Sevin is not effective.

Mr. **Buckman**. My impression is that the time the chemicals are effective is when the eggs hatch.

Mr. **McDade**. But there is a time problem. You miss that window to do it and that is it. So, you have a problem of dollars, but you also have a problem of timeliness, which is as crucial as anything else. Otherwise, you are just not going to have any effect on the infestation, which is true of any other infestations.

Mr. YATES. What is the nature of this chemical? Is it a compound? Does it have the active life that DDT has?

Mr. BUCKMAN. No, sir.

Mr. YATES. Why don't you use some then, at least in Pennsylvania?

Mr. BUCKMAN. The costs of application are high.

Mr. YATES. How expensive is it?

Mr. McDADE. It doesn't make a very good argument for turning it over to the States. It seems a funny kind of logic to say that this is the time to cut back the Federal contributions. I direct that to you gentlemen because you are making the policy decision or rethinking it, I hope.

Mr. AuCOIN. Mr. Chairman.

Mr. YATES. Mr. AuCoin.

REDUCTION IN RESEARCH PERSONNEL

Mr. AuCOIN. Mr. Chairman, before we have this discussion on the research budget——

Mr. YATES. We haven't started yet.

Mr. AuCOIN. Before we get into the discussion, I would like to ask Dr. Buckman to describe the work of the 420 people who will be reduced from the research element of the Agency as a result of this budget submission. I am specifically wondering how many of that number are scientists?

Mr. BUCKMAN. Probably about 50 percent, Mr. AuCoin.

Mr. AuCOIN. Half of them are scientists?

Mr. BUCKMAN. Yes, sir.

Mr. AuCOIN. Is it possible to tell the committee what kind of scientific base may be lost to the Agency as a result of that reduction?

Mr. BUCKMAN. We have about 950 scientists in research in the Forest Service and of 420, about 210 will be scientists, so the proportions are roughly 20 percent.

Mr. AuCOIN. How long does it take to replace the amount of scientific knowledge that might be lost from this? Can you tell the committee how long it would take to replace what we are losing as a result of the loss of these scientists or is that impossible to quantify?

Mr. BUCKMAN. I can give a general indication. About half of our scientists have Ph.D's and, in addition to Ph.D's, some of them now have post-doctoral training.

A Ph.D. usually is about four years beyond a bachelor's degree, so there is a fairly heavy investment in training. And then there is some loss because there is a startup problem with research, and forestry research probably has more problems than most laboratories, because we have to install field experiments.

So there is a several-year——

Mr. AuCOIN. So, you can't turn it on and turn it off when it comes to a research program of this sophistication. Is that what you are saying?

Mr. BUCKMAN. There is some loss of momentum.

Mr. AuCoin. So if you cut it by 50 percent, it is not as though in 1 or 2 fiscal years we can put it all back to where it was. It would take a number of years to restore it?

Mr. Buckman. Yes, sir.

RESTORATION OF RESEARCH FUNDS

Mr. AuCoin. One other question, Mr. Chairman. Chief, I think there is some sentiment in the subcommittee to restore some of the funding for research and I am wondering if you could indicate if the subcommittee made such a decision what your priorities would be in terms of those things that should be funded with any restoration of funding for the research funding?

Mr. Peterson. I think, Mr. Chairman, we need to give quite a bit of thought to the specifics of whatever amounts of money are involved because we would not simply build back what we are now reducing. In some places where we are reducing now, just from the standpoint of efficiency of conducting research, we would not put it back in the same location.

So we would have to go through some kind of deliberative process to arrive at that and have a ready answer.

Mr. Yates. Then you can respond for the record?

Mr. Peterson. Yes, sir, we can do that.

[The information follows:]

Programming of Proposed Reinstated Research Funds

The request to Congress of $98.0 million is $28 million below the Department request level of $126.0 million. This reduction was made in order to help reduce overall Federal spending, the Federal deficit and inflation. Reinstatement of funding would be counter to these vital national objectives.

The budget for forestry research resulted from an effort to compare the returns from a variety of investment opportunities presented by Forest Service programs. The research budget of $98 million is optimal given the objective of reducing Federal spending and fighting inflation. The Forest Service will still have the largest forestry research organization in the world.

Funding shown below is the amount that would be required to reinstate Department levels to each budget activity. Programs are listed in order of priority within each budget activity and are not necessarily those that were reduced or eliminated.

Fire and Atmospheric Sciences Research (+$2,732,000).—Funds would be used for research on prescribed burning, management, and economics of chaparral in California; research on prescribed burning in the West; research on fire meteorology, fire effects, and acid rain; and research on fire effects and smoke management.

Forest Insects and Disease Research (+$5,207,000).—Funds would be used for research in integrated pest management in the West; termites; pest impact assessment technology; cone and seed insects; integrated pest management for southern pine bark beetles; and decay of wood.

Renewable Resources Evaluation Research (+$4,209,000).—Funds would be used for multiple resource evaluations for the Intermountain and Rocky Mountain regions, North Central states, South Central states, Southeastern states, and Pacific Coast; and research on national timber and wood requirements.

Renewable Resources Economics Research (+$1,581,000).—Funds would be used for research on foreign trade, economics of southern forestry, economics of mineral supply on the National Forests, economics of forest protection; methods for evaluating research, increasing supply of hardwood raw materials, economic opportunities to improve productivity of northeastern forest industry; projection methods for national timber supply and forest products and processing feasibility; valuation of forest lands; and economics of pest management.

Surface Environment and Mining Research (+$697,000).—Funds would be used for research on mine reclamation in the East, Southwest, Intermountain, and Rocky Mountain regions, and the northern High Plains.

Trees and Timber Management Research (+$5,547,000).—Funds would be used for research on silviculture, regeneration, reforestation of backlog areas, and growth and yield of western softwood forests; growth and yield forecasting for North Central forests; physiology of oak seedlings and physiological effects of acid rain; silviculture and management of southern pines and Caribbean forests; FIR related research in southwestern Oregon; genetics of western trees; growth and yield and timber stand improvement of eastern hardwood forests; silviculture and wildlife interactions in northern California; and vegetation management.

Watershed Management Research (+$1,885,000).—Funds would be used for research on pinyon-juniper; water quality (acid rain related) in the East; cold water fisheries; water quality and yield; surface erosion and mass soil movement; and riparian watersheds and mineland reclamation.

Wildlife, Range, and Fish Habitat Research (+$1,715,000).—Funds would be used for research on old-growth wildlife habitat, cold water fish habitat, riparian habitat; big game/livestock forage, Great Basin range productivity, forage production on mixed conifer ranges, and wildlife and timber relations in the Intermountain region.

Forest Recreation Research (+$527,000).—Funds would be used for research on urban river access corridors, consequences of recreation on backcountry resources, urban forestry in California, and managing wilderness resources.

Forest Products Utilization Research (+$3,309,000).—Funds would be used for research on fire safety, automated sensing and measurement, utilization of southern pines and product yields of western softwoods; western hardwoods; fiber inserts, failure mechanisms, biological protection of wood, effects of load duration on wood and on reconstituted products, bleaching of pulp, isolation of invading decay, termite bait blocks, nonconventional drying techniques; reconstituted wood products, heat/moisture problems in housing, microbial technology, and processing and drying of high quality hardwoods.

Forest Engineering Research (+$567,000).—Funds would be used for research on harvesting small western softwoods, harvesting southern hardwood thinnings, harvesting of tops and limbs in northern hardwoods; and improved road access.

Mr. CROWELL. I would assume that any restoration or partial restoration would result in restoring some of the projects that are now marked for discontinuation.

Mr. YATES. Well, that is up to the Chief, then, in answering Mr. AuCoin's question?

Mr. CROWELL. That would be up to the Chief and Mr. Buckman in deciding what is the highest priority research. It is like any time you either subtract or add something, you try to do it on the basis of what is most important.

Mr. YATES. Does your question include retaining personnel?

Mr. AUCOIN. It certainly does.

Mr. YATES. The people you think you can use who are not specifically identified with any particular problem; it seems that would be part of your consideration, Chief.

Mr. PETERSON. Yes, sir, but we might not necessarily maintain those people where they are now located. That is the reason it would take a little time and I am not prepared to answer off the top of my head.

BEND RESEARCH LABORATORY

Mr. AUCOIN. I do have one further question.

Mr. YATES. You may ask it.

Mr. AUCOIN. We talked about the Bend Research Laboratory that is being discontinued.

Mr. YATES. Yes.

Mr. AUCOIN. I would like to know what kind of research would be discontinued because of the action that is being proposed with regard to the Bend Laboratory.

Mr. YATES. I thought I read that to you this morning.

Mr. AuCoin. I understand what the whole of the Bend Laboratory was doing and I am wondering if all of those functions will be discontinud or whether some of them are going to be transferred somewhere else.

What is dropping through the cracks?

Mr. Buckman. There are two major activities at the Bend Laboratory, Mr. AuCoin. One of them concerns prescribed burning as a land management technique, and one of them involves silviculture of lodgepole pine and ponderosa pine.

My understanding is that the pine research has been under way for a good, long time and we think we can throttle that work back. We are not going to eliminate it, but we are going to throttle it back.

I need to point out—

Mr. Yates. To throttle is to strangle.

Mr. Buckman. To slow.

Mr. Yates. That is better.

Mr. Buckman. We have three locations in eastern Oregon and Washington and the total budget reduction for those locations is about $700,000.

Our proposal, and I confess that these are very difficult choices, is to remove the remaining functions to the Wenatchee Laboratory and to La Grande, Oregon. The fire work will continue, but be headquartered out of La Grande.

The new mission, which is the silviculture and upper slope will be done at Wenatchee, Washington.

Mr. AuCoin. So, all functions that are being performed there will be picked up or just done elsewhere. There will be no loss in activity to the Forest Service? No research work is going to be terminated, it will only be transferred to other locations?

Mr. Buckman. No, it won't be terminated, but there will be some reduction particularly research on the pine trees.

RANGE AND RELATED RESOURCE EVALUATION PROJECT

Mr. AuCoin. There is an Oregon range and related resource evaluation project which evaluates the social and economic concepts of resource management practices on wild lands and I further understand that the project now is in its sixth year on a 10-year term.

There has been about $10 million spent on the program so far and about $10 million needed to finish it. Is there anything in the budget for this project?

Mr. Buckman. Yes, sir, in fiscal 1983 there is $396,000 in the budget for all program components combined. That includes both the National Forest System and Research.

Mr. AuCoin. Will funds out of that sum that you have just cited eventually be available for this project? Is it contemplated this project will be funded at any level?

Mr. Buckman. My understanding is that in 1984 and beyond the action part of that program will terminate. That is, there wouldn't be any more field installations, but the research monitoring will be continued.

Mr. AuCoin. What is the difference between action and monitoring?

Mr. **Buckman**. The action part of the program has to do with installation of range improvement practices like fences and watering systems.

Mr. **AuCoin**. Well, does that mean that the $10 million previous investment is going to bear fruit? Will we have a completion of the project and the work of the project with what you propose to fund for the remainder of the project or will the $10 million yield no results because it won't be brought to fruition?

Mr. **Buckman**. The $10 million will yield positive results. We need to measure with the follow-up monitoring just how effective it is. That is the purpose of the research monitoring continuing for several years after the installation program ends.

Mr. **AuCoin**. This is the last question, Mr. Chairman. I will get off this particular project, but why was it stated then that $4 million more was needed to complete this project?

If that statement is true, either the estimate was inflated in the first place, or you are not going to be able to bring to completion the work of this project, a project that has taken $10 million.

Mr. **Peterson**. At the time this project was first envisioned it was a cooperative undertaking of the Soil Conservation Service, Forest Service, Extension Service, Bureau of Land Management, the State of Oregon, and so on.

They looked at a large area of land there and said, "We ought to try in a systematic way to put in different types of treatment to different land, including different rotation systems and so on, and find out what the effect would be."

The total cost of all of the work they envisioned over that period of time, I believe, was $10 million.

Now, they have completed, I believe, around $6 million now and in looking at other demands for funds they have completed the highest priority projects. It was time now, given the shortage of funds, to be sure we evaluated what had been done to date and to look at the costs and benefits of it.

We will continue the cooperative approach there and will inform other agencies that what we will try to do is to keep some people on the ground there to keep the cooperative undertaking, including the rotations, ongoing.

It is true that there is some remaining work there that could be done, but the highest priority and the most cost-effective work has been completed.

Mr. **AuCoin**. So it is not a high priority right now?

Mr. **Peterson**. Not as high as what has been done, no.

Mr. **AuCoin**. Thank you, Mr. Chairman.

MELALUKA TREE

Mr. **Yates**. Mr. Buckman, may I ask you about the melaluka, the Australian tree that is taking over some of southern Florida.

Mr. **Buckman**. I am not familiar with the melaluka.

Mr. **Yates**. Apparently, they have no way of controlling it. We have tried chemicals and we say it releases its seeds ahead of time. When it is sprayed with chemicals the seeds go out. It knows how to protect itself apparently.

LABORATORY CLOSURES

Suppose you were to close only 8 or 7 laboratories. Do you know which ones you would keep?

Mr. **Buckman**. We have them ranked in priority.

Mr. **Yates**. Suppose in view of Mr. AuCoin's questions, we decided that there should be additional funds put in for research, what would be the first laboratory you would keep?

You need to think about this, don't you?

Mr. **Peterson**. I think we need to think about this.

[The information follows:]

Priorities for Retention of Research Laboratories Proposed for Closure

We would assign priority to retaining the laboratories in Bend, Oregon, and Reno, Nevada, because of the geographic extent and timeliness of the problems being addressed.

We attach low priority to the retention of the other locations because the problems addressed are of lesser importance, the research is nearing completion, or the research can be conducted more efficiently elsewhere. If there were no budget reductions, we would still consider the following locations to be marginal: Fayetteville, Ark.; Lubbock, Tex.; Marquette, Mich.; Beltsville, Md.; Sewanee, Tenn.; Bottineau, N. Dak.; and Lehigh Acres, Fla.

RESEARCH REDUCTIONS AND THE PAY ACT

Mr. **Yates**. What portion of the proposed reductions are due to Pay Act absorption? This is only your budget we are talking about, the research budget?

Mr. **Buckman**. Mr. Chairman, we estimate an additional 6 or 7 percent per year, because of inflationary consequences and Pay Act absorption.

Mr. **Yates**. Which of the research activities do you consider most important, that you are still going to do with your limited budget?

Mr. **Buckman**. We did a detailed examination of the entire program, all 240 research work units and all 950 individual positions. We derived from that examination the work that we thought was most relevant, most current, and most in accord with the priorities of this Administration.

Some work is retained in all of the budget activities that are described there.

Mr. **Yates**. Do you have those that you considered to be top priority?

Mr. **Buckman**. I think, Mr. Chairman, the forest protection, timber management research and utilization.

Mr. **Yates**. And they aren't going to be hurt by the cutbacks?

Mr. **Buckman**. There are portions of them that will be.

Mr. **Yates**. If they are top priority, why are you hurting them?

Mr. **Buckman**. Because we tried to decide the highest priority components from within.

UNDERINVESTMENT IN RESEARCH

Mr. **Yates**. There is a publication by the Forest Service entitled, "Criteria for Deciding About Forestry Research Programs." Among the conclusions in the report was the following: "The public sector is underinvesting in agriculture and forestry R&D, considering the rates of return and contributions to productivity growth."

Do you agree with that? You probably wrote it, didn't you?

Mr. **Buckman**. I didn't write that, Mr. Chairman.

Mr. **Yates**. Would you agree that we are underinvesting in forestry R&D?

Mr. **Buckman**. There is strong evidence that we are underinvesting in forestry research with some good reason.

Mr. **Yates**. Do you draw a line between agriculture and forestry?

Mr. **Buckman**. I consider forestry to be a part of agriculture in this instance.

Mr. **Yates**. What would be the consequences of underinvestment apart from the gypsy moth?

Mr. **Buckman**. That cost-effective opportunities for new technology are being foregone.

Mr. **Yates**. Do you believe that there is a relationship between your research and development programs and the rates of return and contributions?

Mr. **Buckman**. Yes, sir, I do.

Mr. **Yates**. Do you have examples of how that is taking place?

Mr. **Buckman**. Yes, sir, I do.

Mr. **Yates**. Would you put them in the record when you get back from Yugoslavia?

Mr. **Buckman**. Yes, sir. Some of them are described in the booklet that you have in front of you.

[The information follows:]

RESEARCH COST EFFECTIVE OPPORTUNITIES

The Forest Service conducted a hindsight analysis of 81 recent research innovations. At least half the innovations resulted in benefits such as creation of income or employment, increased utilization of natural resources, and improved quality of physical or biological environments. In 40 to 50 percent of the cases, new or improved products resulted, decisionmaking was improved, management costs were reduced, or lower prices and costs for commodities resulted.

Monetary benefits could be suggested for 22 of the 81 innovations studied. Examples of the 22 innovations, research costs, and estimated first-year benefits are shown below:

[In millions of dollars]

Innovation	Total research cost	Estimated first-year benefit
Differential campsite pricing	0.5	55.0
Paraquat for induction of lightwood	11.8	216.0
Bark chip separation/segregation	1.9	240.0
Mobile chipper for residue recovery	0.3	75.0
Best open face sawmill technology	1.0	32.0
Home energy saving using trees	1.2	1,215.0
Multiresource inventory system	0.2	2.0
Fusiform rust resistant southern pines	2.2	27.0
Aerial direct seeding of southern pines	1.0	4.0
Bark residue utilization	1.2	2.0
Biocontrol of larch casebearer	1.9	10.0
Wilderness sanitation	0.9	0.7
Total	24.1	1,878.7

The fiscal year 1983 budget reflects the results of this analysis and includes funding for what is believed to be the most cost effective research opportunities.

RELATIONSHIP OF RESEARCH TO MANAGEMENT

Mr. YATES. Would you say that research has failed to keep pace with expansion of the National Forest System land management?

Mr. BUCKMAN. The relative proportion of the Forest Service budget that goes into research is lower today than it was 10 years ago.

Mr. YATES. Is the relationship of research to management as important in business firms, not in your business, but in the industrial field, as you consider research to be for your field? We keep hearing that the companies that are doing the research are primarily the ones that get ahead.

In other words, can you see any continued increase in return without indulging in adequate research?

Mr. BUCKMAN. Perhaps I could answer the question this way: The forest products sector, forestry, has one of the lowest investment ratios in research of any of the sectors in industry.

Research expenditures as a percentages of sales value run something like five-tenths of 1 percent.

FORESTRY RESEARCH IN PRIVATE INDUSTRY

Mr. YATES. If, as we are doing under this budget, the Government cuts back its research program, will private industry take it up? Will they increase their research investment?

Mr. BUCKMAN. I think they will, Mr. Chairman. How much I am not sure. There are new incentives built into the Tax Reform Act of 1981. No one is sure at this moment how much additional research that will result in.

I would think so.

Mr. YATES. Well, would you have known about it by this time? The tax benefit is already in existence, isn't it?

Mr. PETERSON. It is a brandnew provision and it would take some time for companies to take advantage of it.

Mr. YATES. They have known about it for a year.

Mr. PETERSON. I think, as Assistant Secretary Crowell said this morning, there are probably companies who would be very enthused about that.

ADEQUATE FOREST RESEARCH BUDGET LEVEL

Mr. YATES. Well, is it fair to ask you whether you believe the 1983 request for forest research reflects an adequate level of investment?

Mr. CROWELL. That is probably not a fair question for Dr. Buckman, Mr. Chairman.

Mr. YATES. If I were to ask you that, you would say, "Yes, sir?"

Mr. CROWELL. Yes, sir, I would.

Mr. YATES. Well, I asked Dr. Buckman that question. I dare you to say, "no." Did you want to ask a question?

Mr. REGULA. No.

Mr. YATES. Let me get an answer.

Mr. BUCKMAN. I am an enthusiastic advocate for research and what it can contribute. I do not have the purview to make the hard choices between the various programs in the Forest Service.

Mr. YATES. Okay.

Well, suppose I had made it more specific and asked you whether you have requested an adequate level of investment for, say, land management activities, or timber, or minerals, or recreation, or pest management, or fires, would your answer still be the same?

Mr. **Buckman**. Yes, sir, it would.

Mr. **Yates**. Well, is it an adequate level in relation to the need you see for future growth in productivity?

Mr. **Crowell**. Mr. Chairman, there are some reasons why——

Mr. **Yates**. Budget constraints.

Mr. **Crowell**. There are reasons why the forest products industry has not invested as heavily in research as have some other industries. Much of the research that goes into forestry is devoted either to land management and forest management in the sense of relating one potential multiple use to another.

Some of the other research is in terms of improved genetic stock and in terms of protecting the forest resource.

Additional research goes into improvement of utilization. Now, a number of those categories lead to effectively stretching supplies or stretching out the supply of raw material.

The fact is we do not have an economic incentive yet in our economy to do that kind of research now because we have so very much wood growing in this country and so very much capability to grow more wood that there is not a priority incentive to industry to invest in forest research.

Because, although it lasts for a very long time, once a tree grows, trees do die and rot away.

So the major part of the reason why the forest products industry traditionally has not invested heavily in research and development, is the fact that there is not an economic incentive or compunction to do so.

Now, some of the things that the Forest Service has been doing in the way of research are the sort of things which anticipate what the industry might have done had it been under that sort of economic compulsion.

The fact is that we have been proceeding with research, in some instances, that could have application in the future and undoubtedly will have application in the future, but it is often a distant future.

So, the judgment to be made at that juncture, once you realize this is to decide, can we defer some of that research to an appointed time when we are closer to when it would foreseeably be activated and applied. This is one of the criteria that the Forest Service has applied in making the difficult judgments that it has had to make to achieve the 11 percent reduction in research funds and projects that this budget calls for.

These choices have been made with logic and with analysis, and although Dr. Buckman and his people have found it a very difficult choice to make, they have done it in a scientific way and in a way that is also economically defensible.

Mr. **Yates**. Mr. Regula.

Mr. **Regula**. Thank you, Mr. Chairman.

RESEARCH IN PRIVATE INDUSTRY

I note, Mr. Buckman, you said in the hearings in 1981 and I quote, "Today, the industries are not likely to do very much research that is risky, more fundamental, or research where they cannot capture the benefits very quickly." Does that statement still stand?

Mr. BUCKMAN. That is still true.

Mr. REGULA. Mr. Peterson, you said likewise, "It is absolutely essential that we keep a vigorous research program going if we are going to protect the land as we develop it. If we are going to improve productivity of that land."

Does that statement still stand?

Mr. PETERSON. Yes, sir.

Mr. REGULA. In 1982, I believe research was within $1 million of the 1981 level. In last year's hearing you said, "We held it within about $1 million of the 1981 level, which represents the importance we see in research."

Now, of course, this year, you are requesting $10 million below the 1981, level which would seem to be in conflict with your position in last year's hearings. How would you respond to that?

Mr. PETERSON. I guess you could say that all of us, 2 years ago and 1 year ago, had hoped that the economy would be somewhat better than it is now, so that we could continue.

Research is an investment in long-term productivity. Any time your are in a budget crunch, you almost have to defer some investments because you can't just close the shop or you can't close fire protection and other things and walk away from it.

So you have to make some very difficult choices between your alternative investments. We made some really difficult choices to try to defer the research that was, in our judgment, less likely to be highly productive.

Now, when we are looking at research there are several ways to look at it. One is the size of the problem that you are working with. One reason we increased gypsy moth research is that gypsy moths will spread. We need to find better answers than spraying.

One other criteria is the potential benefits from discovering something. In other words, how big is the expense. What kind of tree are you looking at? What is the economic importance? So you go through all of those criteria.

There is a lot of other desirable research that you might do and some of that might, in fact, yield very important results that nobody knows about.

So we have gone through a traumatic process here. Dr. Buckman had every research Station Director in the United States come in and review, project by project to help make the very difficult choices.

RESEARCH FOR SOIL PRESERVATION

Mr. REGULA. I was interested in your comment last year, and I use the words from your answer.

You say, "If we are going to protect the land as we develop it." I wonder if you would enlarge for the record what you mean by protecting the land. It seems to me, at least with the emphasis on soil preservation, that research goes beyond seeing if we can get a bigger tree in a shorter period of time in terms of the fiber end of it, but also the impact that forest research has on soil preservation or the problems of erosion.

Mr. PETERSON. I will be glad to do that. We are doing a lot of research relating to road construction, such as looking at how we can build roads with less impact.

Mr. REGULA. Well, is land preservation, that is to keep the soil out of the Mississippi River, if you will, and to hold it in place, is that an important aspect of forestry research?

Mr. PETERSON. Yes, sir, very important.

WATERSHED RESEARCH PROGRAMS

Mr. BUCKMAN. Mr. Regula, the Forest Service maintains three or four major watershed research programs in the country and some of these are world renowned, Corveeta in North Carolina, Hubbard Brook in New Hampshire, Fraiser in Colorado, and H. J. Andrews in Oregon.

These watersheds have been treated in a variety of ways, and we measure the input. That is, we measure the energy that goes into those watersheds from the sun. We collect rain samples to see what precise precipitation and deposition of materials comes in, and then we measure what comes out of the stream down below.

Essentially, these are closed watersheds so we can make accurate measurements.

Mr. REGULA. You are really suggesting that a bulk of a given watershed is under Forest Service control?

Mr. BUCKMAN. These watersheds are entirely under the control of the scientists, yes.

Mr. REGULA. How many millions of acreage of drainage basin would you say is directly controlled under Forest Service management? Of course, I suppose every acre you have is in a drainage basin somewhere?

Mr. CROWELL. Yes, it would be. But if you are talking about acres where all the drainage consists of Forest Service acreage, that would be a very difficult question.

Mr. PETERSON. You could say, of 190 million acres, which is national forest land, there is another 25 percent private land scattered throughout that. So, in many cases, we are controlling about 75 percent of the watershed. Sometimes it is 90 and sometimes it is as low as 50.

Mr. REGULA. I assume that the Forest Service lands would be at the upper reaches and, therefore, the ability to hold back water would be important to downstream impact?

Mr. PETERSON. That is generally true, although there are exceptions to that.

SOIL AND WATER MANAGEMENT

Mr. REGULA. I note in your request in soil and water management, your request is $14 million under the prior year. It seems to me that in a period where we are emphasizing preservation of soil, that it is going the wrong way to reduce that kind of funding.

Mr. Crowell. Mr. AuCoin addressed that to some extent this morning, and we tried to explain that the reduction in the soil and water conservation line item is related to rehabilitation and restoration of sites which have been damaged by some sort of national catastrophe.

Mr. Regula. It isn't in the research?

Mr. Crowell. It is not in research, nor is it in the areas that we are planning to do harvesting. As I said this morning, one of the criteria I laid down when we put this together was we were not going to reduce the soil and water capability in the areas under management.

Mr. AuCoin. Would my colleague yield for one second on that point.

Mr. Regula. Yes, sir.

DETERIORATED LANDS

Mr. AuCoin. Based on what you have just said, I want to establish whether or not the 290,000 acres with deteriorating soil conditions will increase based on this budget request?

Mr. Crowell. There is no way of telling whether it might increase because, as I say, much of it is attributable to either a natural catastrophe or it has been Forest Service land for a long time, or, as the Chief pointed out this morning, some of the acreage that we now manage was acquired with a lot of abused land in it. Consequently, some of it may be in need of some kind of rehabilitation, some of it may not be.

Now, the example of the kind of thing that may happen is that we have a lot of national forest land surrounding the Los Angeles Basin. It is brush land and we spend a lot of money each year in fire protection, fire suppression, and in flood protection because once those lands burn off, we get some terrible floods coming into the L.A. Basin.

Sometimes there is more damage done from those floods than there is from the fire. That would be the kind of example, occurrences of that sort could take place at any time and could lead to the kind of soil erosion or the potential for soil erosion that we would direct rehabilitation efforts at.

Mr. AuCoin. The only reason I asked the question is that since your response this morning, I began to think more about what that means. I understood you to say this morning that you are tending not to invest in the Soils Improvement Program to restore the backlog, at least for the present time, and that most of these dollars will go to support current timber and minerals activities so that there is not a degradation as a result of those two functions.

Mr. Crowell. Yes, that is correct.

Mr. AuCoin. Here is my concern, if most of the dollars for soils and water improvement are directed toward timber and mineral activity, you are not spending these dollars elsewhere in the national forests. To the extent you fail to do that in those other areas, you could have an increase in total backlog of acres of lands that have deteriorated.

So we can't think of the 290,000 acre total as a static figure. It could increase under this budget submission.

Mr. CROWELL. That could happen regardless of what budget level we had, depending upon what the natural occurrences were.

FOREST LANDS PRODUCTIVE TO FOREST PRODUCTS

Mr. REGULA. What percent of the land under the control of the Forest Service is productive to forest products as opposed to other types of use?

Mr. CROWELL. We have in excess of 190 million acres in the Forest Service. We don't know what additions have been made in Alaska in 1980. But there are over 190 million acres. Today we classify approximately 89 million acres as commercial timber land base. That means that it is capable of growing 20 cubic feet per acre per year, which is not very much, compared to the very highest site planned, but it is commercially feasible to manage land that can grow that much timber within a year.

Now, the 89 million acres also represent a land base with that kind of growing capability which is not withdrawn for other purposes, such as wilderness.

We have approximately 12 to 15 million acres, as I recall, that would be classified as commercial timber land had it not been withdrawn.

So in summary, one can say that less than half of the National Forest System acreage is classed as commercially productive timber land capable of growing and producing timber crops.

REFORESTATION

Mr. REGULA. Do you take some of the land that at present does not have that usage and plant it in anticipation of remaining in production?

Mr. CROWELL. If the soil types and the sites indicate that land has the capability of achieving that 20 cubic feet per acre per year growth rate or more, and it has been forest for some reason or another, that would be the kind of thing, that would be in the reforestation backlog referred to this morning and it would be a candidate for reforestation.

The higher the site, the more accessible it is, the higher priority to begin with the reforestation.

INCREASE IN GENERAL ADMINISTRATION

Mr. REGULA. I am a little bit puzzled as to why in the face of the cuts on research programs, that the general administration budget is up $22 million over the 1981 amount. How would you explain that hefty increase in the administrative budget while you are cutting research?

Mr. CROWELL. Very quickly, I think pay increases and inflation would be the bulk of what would cause that.

Mr. PETERSON. Those are the only two things. We have less people working on that activity in 1983 than we had in 1981.

Mr. REGULA. One other thing that concerns me is that as you reduce staff that there will be a temptation to use outside contractors, to use consultants, et cetera. Do you anticipate that could happen in the light of the diminishing staff in-house?

Mr. PETERSON. Well, we, for many years, had used a variety of contractors and consultants. We are not anticipating any significant change in that situation. We contract for airplanes, we contract for road construction.

IN-HOUSE RESEARCH

Mr. REGULA. Is most of your research in-house?

Mr. PETERSON. In research, there will be somewhat less contract research in 1983 than in 1982.

Mr. BUCKMAN. In 1981, about 11 percent of our research was done by universities. It probably will be closer to 6 percent in 1983.

Mr. REGULA. I'll just make one last comment, that I am bothered by an increase of $181 million overall in the budget and a reduction in research. It seems that this may be a short-sighted policy. While in the short haul we must get more products in the marketplace, in terms of the increased usage of wood over 2 or 3 decades, I feel that it would be a wise investment to keep that research budget up.

Mr. CROWELL. For the reasons that I expressed to the chairman, we tried to make some assessments of the priorities that should be given. You were not here this morning, Congressman, when we talked about one of the things that we think we need to do is to manage the national forests somewhat more intensively than we have in the past, both to supply wood for the needs of the country and also to increase the productivity for the future years from the national forests.

Mr. REGULA. I understand that.

Mr. CROWELL. So, that $181 million increase is made up in part by what we regard to be investments in that management which will be returned many fold in a very few years, very short time span, plus the rest of it would be accounted for in terms of increased payments that go out to the States.

You know, we share 25 percent of the receipts that are generated with the States and, of course, that does appear in our budget as an outlay. And we do anticipate a larger timber harvest next year because we expect that the economy will have picked up and interest rates will be down, at least somewhat, and that will cause a pickup in the economy.

We also anticipate that the rates per thousand that we receive for timber that is purchased by contractors now under contract will be higher than it was this year.

It is $125 a thousand for 1982; it is estimated to be $158 a thousand in 1983, so that the receipts level will be up. That also means that 25 percent of those receipts will be going out to the States.

That shows up as an outlay.

Mr. REGULA. Thank you, Mr. Chairman.

OTHER USDA RESEARCH PROGRAMS

Mr. YATES. Has the funding for other research programs in the Department of Agriculture been subject to the same cuts as in the Forestry Research Program?

Mr. CROWELL. It has not, Mr. Chairman. In fact, the budget is up. I couldn't tell you the figures, but that was one of the areas that the Secretary of Agriculture opted to keep up, other agricultural research, except forestry.

Mr. **Yates**. Why did he exclude forestry?

Mr. **Crowell**. The reasons for that is that an analysis shows that the potential for return from agricultural research is better than it could be from some forestry research.

So that is the reason for the difference. Partly because there is a higher demand for agricultural products in the world than there is for wood products, relatively speaking.

In other words, we don't have the surplus of agricultural products that we have in wood products and consequently, there is more incentive to perform research in order to stay ahead of the anticipated demands or increases in demands for agricultural products.

When we get to the same point some day, presumably with world population increases and demands for forest products, then you will be at the point where increased forestry research would be very much in order and would promise the same kind of high return as agricultural research promises today.

EXTRAMURAL, COOPERATIVE AND GRANT RESEARCH

Mr. **Yates**. What portion of the 1983 budget will fund extramural research?

Mr. **Buckman**. About 6 percent, Mr. Chairman.

Mr. **Crowell**. Of the research budget.

Mr. **Yates**. How does this compare to 1981 and 1982?

Mr. **Buckman**. About 11 percent in 1981 and 9 percent in 1982.

Mr. **Yates**. Then it is cut by about 50 percent. Are cooperative research projects cost shared?

Mr. **Buckman**. There are two or three authorities under which we do that work and one of them is cost sharing, the so-called cooperative agreement kind of research is cost shared.

The collaborator needs to make a contribution to the work. The others are not necessarily cost shared.

Mr. **Yates**. Do you have a policy for cooperative cost sharing?

Mr. **Buckman**. For cooperative agreement, but not grants or contracts.

Mr. **Yates**. Which is more efficient, extramural research or inhouse?

Mr. **Buckman**. A mixed bag, Mr. Chairman, determined on a case-by-case basis. Extramural research permits us to acquire skills that we need for only short periods of time. That is, we don't have to recruit a scientist for a long period of time.

We get the skills from a university or another research organization.

INVENTORY OF FOREST RESOURCES

Mr. **Yates**. What is the importance of the inventory of forest resources? I know you are extending it.

Mr. **Buckman**. Inventory of forest resources is a job that the Forest Service has had for over 50 years. It provides the national inventory of timber resources and, with the passage of the Resources Funding Act of 1974, the other resources on forest land as well.

For public purposes, the forest inventories provide the foundation for State planning, for a large array of policy issues. The forest survey provides the foundation for the assessment which is one of the major documents required by the Resources Planning Act.

For private firms, the survey provides a background for all kinds of investment decisions.

REMOTE SENSING

Mr. YATES. What is involved in your research of the use of remote sensing and land classification?

Mr. BUCKMAN. It is the use of imagery generated from aircraft or orbiting satellites to classify lands for a variety of purposes: timber inventory, wildlife habitat, water conditions, et cetera.

Mr. PETERSON. We use some of that to look at such things as drought that might be causing an insect problem in large areas. We can also see changes in land use.

Mr. YATES. Should the research be reduced?

Mr. BUCKMAN. In remote sensing? There is a reduction in the remote sensing research.

Mr. YATES. I know there is. I am asking whether it should be.

Mr. CROWELL. It is relatively expensive to maintain.

Mr. YATES. I guess so, but should it be reduced? How valid is it? How worthy is it? If it is a worthy project, expense is only one of the factors.

Mr. CROWELL. It is only one of the factors, but it is one of the factors that has to be taken into account along with use of the data once you acquire it.

We think we can get along with a reduction as indicated in the budget.

Mr. PETERSON. If I could supplement that a little bit, we have had projects with universities and with NASA for many years to try to improve remote sensing. The state of the art is pretty good right now in terms of daily application. It could always be improved, but the state of the art is pretty good right now.

SURFACE ENVIRONMENT AND MINING (SEAM) PROGRAM

Mr. YATES. Why do you carry out environment and mining research?

Mr. BUCKMAN. That is our so-called SEAM project. It had its origins at the beginning of the energy crisis about 8 or 10 years ago. The purpose of the project was to develop rehabilitation techniques for mined land, both in the East and in the West.

We think that program, Mr. Chairman, has been highly successful.

Mr. YATES. What other Federal agencies are involved in SEAM?

Mr. BUCKMAN. I don't have that information.

Mr. YATES. Would you put it in the record?

Mr. BUCKMAN. Certainly.

[The information follows:]

SEAM PROGRAM

The Surface Environment and Mining (SEAM) program was chartered by the Forest Service in 1973 to provide and apply technology to help manage national forests and grasslands affected by increasing mining activities. Although SEAM ended as a research, development, and application program in 1979, some work begun under the program has continued in various Forest Service operating units in the Intermountain, Rocky Mountain, and Northeastern Forest Experiment Stations. Since 1973, the Forest Service, other agencies, States and private industry have worked cooperatively on SEAM-related activities; however, SEAM is a Forest Service program and funding has been to this agency only. The proposed budget for SEAM in fiscal year 1983 is $1.3 million. This funding will allow continued research on the regeneration of mined lands in the West and Appalachian areas of the East, and the development of improved trees and shrubs for mined land reclamation.

FORESTRY INTENSIFIED RESEARCH

Mr. YATES. Why are you reducing the forestry intensified research funding?

Mr. BUCKMAN. Because we are confronted with a significant budget reduction, Mr. Chairman, and simply can't make the funds stretch to cover all activities.

I believe that the reduction is about $250,000, which is proportionate to the overall spending cut.

Mr. YATES. Would you be able to maintain the program?

Mr. BUCKMAN. There will be some stretching.

Mr. YATES. How much money is included for acid rain research?

Mr. BUCKMAN. $1.6 million.

Mr. YATES. How does this compare with 1982 and 1983?

Mr. BUCKMAN. $83,000 in 1982.

Mr. YATES. What acid rain responsibilities do you have?

Mr. BUCKMAN. The Forest Service is part of a multi-Agency research plan required by the Energy Security Act. As I understand it, there was a section of the Energy Security Act that had to do with atmospheric deposition or acid rain.

We are a party to that multi-Agency plan, and our activities involve terrestrial monitoring, that is tracking what happens on forest lands, particularly in the eastern U.S.

Mr. PETERSON. Also, what is the effect on the forest from these depositions? It is a two-part effort. One is monitoring, the other is effect.

WILDLIFE HABITAT RESEARCH

Mr. YATES. What about wildlife habitat research? Is the funding inadequate for that program?

Mr. BUCKMAN. We think that the proportions of the funding are about right for this year's budget, Mr. Chairman.

WOOD WASTE UTILIZATION RESEARCH

Mr. YATES. How much money do you have for wood waste utilization research?

Mr. BUCKMAN. For wood waste research or wood waste———

Mr. YATES. Wood waste utilization research.

Mr. BUCKMAN. I don't have that information.

Mr. YATES. You may put it in the record.

[The information follows:]

UTILIZATION OF WOOD RESIDUE

Approximately 20 percent or $2.9 million of the proposed funding of $14.8 million for forest products utilization research is directed toward studying wood wastes. Projects include alcohols and chemicals from wastes, paper from wood residues and urban waste paper, energy production from waste, and recovery of logging wastes.

Also, approximately 20 percent or $530,000 of the proposed funding of $2.7 million for forest engineering research is directed toward wood wastes recovery and processing research.

Mr. YATES. What is involved in that research?

Mr. BUCKMAN. This is part of the Chief's plan to remove an additional one million cubic feet of wood from national forest lands that are classified as wood waste.

Mr. PETERSON. Mr. Chairman, this was an effort to solve a technical and economic problem associated with wood fiber that is there now, but not economically or technically usable. There has been a lot of interest in that and some work done already.

Mr. YATES. What portion of forest products research is carried out in cooperation with private industry?

Mr. BUCKMAN. What share of the———

Mr. YATES. Yes.

Mr. BUCKMAN. About 5 percent.

Mr. YATES. That is precise enough.

Mr. BUCKMAN. That statistic, Mr. Chairman, comes from the study Mr. Crowell mentioned this morning, done by OMB.

Mr. YATES. What are the cost-sharing requirements?

Mr. BUCKMAN. There are no formal cost-sharing requirements, but there is an exchange of materials, services in kind and occasionally cash contributions.

LAPSED RESEARCH FUNDS IN 1981

Mr. YATES. What is the basis for the unobligated balance of $1.8 million which lapsed in fiscal 1981? Do you want to put that in the record?

Mr. CROWELL. Yes, sir.

Mr. PETERSON. Is that in connection with research?

Mr. YATES. Yes.

Mr. PETERSON. I would suspect that it represents a lot of small balances around different locations.

[The information follows:]

LAPSED RESEARCH FUNDS IN 1981

The unobligated balance shown as lapsed in the President's Budget was the year end balance figure. Since that time our accounting records have picked up those obligations that did not get into the system before the books were closed. It now appears there will be no balances remaining, in lieu of the $1,757,000 shown as lapsed.

Mr. YATES. Any questions, Mr. AuCoin?

INFLATION EFFECT ON RESEARCH BUDGET

Mr. AUCOIN. Only one, Mr. Chairman. We are dealing with a proposal for an 11 percent decrease in funding for research. I would like to know what toll inflation has taken on the research program in the last 12 months so we have an idea of what the real reductions are over, say, one year ago, if this proposal goes through?

Mr. **Buckman**. Our estimates, Mr. AuCoin, are that inflation and Pay Act absorption have been running at the rate of 6 to 7 percent per year on top of that 11 percent.

Mr. **AuCoin**. So, 17 percent?

Mr. **Buckman**. Yes, including utility costs, travel costs and all of the things that are related.

Mr. **AuCoin**. In terms of real dollars, we are talking about a 17-percent reduction in research activities for forestry?

Mr. **Buckman**. Yes.

Mr. **Yates**. Mr. McDade, do you have any question?

Mr. **McDade**. Nothing at the present time.

Mr. **Yates**. Mr. Regula?

Mr. **Regula**. No.

Mr. **Yates**. Okay, Dr. Buckman, you can go home and pack. Thank you very much.

SEVERANCE TAX PAID BY PRIVATE INDUSTRY IN OREGON

Mr. Crowell, for western Oregon for the past three fiscal years, would it be possible to develop the amount per thousand board feet that is paid in severance tax by private industry?

Mr. **Crowell**. By the private sector, I suspect that would be available from our Department of Revenue, yes, sir.

Mr. **Yates**. You also pay that for national forest and BLM timber, don't you?

Mr. **Crowell**. No, sir, we don't. What we do is contribute on behalf—no, we don't have anything to do with O&C, except with one very small exception. But we pay 25 percent of the gross receipts from the National Forest System to the counties. And that has been a long-established habit.

Mr. **Yates**. Would you put that in the record, the amount for the last several fiscal years, together with the other two?

Mr. **Crowell**. Sure.

Mr. **Yates**. With the tax figure, severance tax figure?

Mr. **Crowell**. Okay. Do you want us to get that from the Department of Revenue?

Mr. **Yates**. Can you do that?

Mr. **Crowell**. I think so, yes.

[The information follows:]

WESTERN OREGON SEVERANCE TAX [1]

[Dollars in millions—fiscal year July 1-June 30]

	Dollars	Volume, (billion board feet)	Amount per thousand board feet [2]
1978-79	$37.4	2.9	$12.90
1979-80	44.7	2.7	16.56
1980-81	50.2	2.5	20.08
1981-82	[3] 34.0	[4] 1.2	([5])

[1] Information furnished by State of Oregon, Department of Revenue, Forestry. Taxes on non-Federal timber.

[2] Volume is not directly related to same time period as receipt of taxes so amount per/MBF is only a statistical average of available figures. Receipts at the beginning of fiscal year are generally for volume harvested the latter part of the prior fiscal year.

[3] 3 quarts.

[4] 2 quarts.

[5] Not comparable.

25 PERCENT PAYMENTS FROM NATIONAL FOREST FUND TO STATE OF OREGON

[In millions of dollars]

Payment year	Receipt year	Amount
1978	1977	$89.8
1979	1978	101.6
1980	1979	121.1
1981	1980	98.9
1982	1981	89.8

TERMINATION OF TIMBER SALE CONTRACTS

Mr. YATES. There is a rumor that the Department is considering a request by contractors who want to have their contracts terminated so they could be rebid at lower prices.

Is there any validity to that rumor?

Mr. CROWELL. Well, as I indicated this morning, we certainly are reviewing, with an open mind, the propensity for dealing with the incipient problem of 10 million board feet under contract at rates which are clearly too high to be operated profitably.

I indicated in response to a question, either from Congressman AuCoin or from Congressman Dicks, that we had a number of alternatives that were under discussion and under consideration.

We, of course, are following those kinds of discussions that are taking place both in the industry and outside of the industry. We also have some going on in-house, as to ways in which we might view this problem if it continues to be as serious as it now appears to be.

Mr. YATES. How many such contracts are there?

Mr. CROWELL. I don't know, offhand.

Mr. YATES. Are there many?

Mr. CROWELL. Yes, there are hundreds of them.

Mr. YATES. Hundreds of them?

Mr. CROWELL. Yes, sir.

Mr. YATES. How much money is involved?

Mr. CROWELL. Thousands of them, the Chief says.

Mr. YATES. How much money is involved?

Mr. PETERSON. Well, in the first place, we don't know. All we know is that there are 10 million board feet that appears to be economically unavailable to harvest at a profit today. Now, our average sale out there is about, probably, around 10, maybe 15 million feet, so there are several thousand sales.

But how many people would take advantage of that termination provision is what we don't know. Because they would have to evaluate what they are holding it at and what they might get it back at.

Mr. CROWELL. One of the proposals is also to limit the amount that any one purchaser can turn back. As you can imagine, there are all kinds of proposals that are floating around, and ideas. None of them have been firmed up by anybody at this juncture.

It might be well to add that almost any remedy which would be settled upon as necessary would require legislation.

Mr. YATES. It would?

Mr. CROWELL. Yes, sir.

Mr. YATES. So that there has been no rebidding of these contracts?

Mr. CROWELL. No termination of them, either by default or by allowance of a voluntary termination. Until that happens, obviously there would be no reoffering.

Mr. YATES. At what point does default occur?

Mr. CROWELL. Well, default would occur normally when the end of the contract term is reached without the sale having been operated either partly or fully.

TIMBER CONTRACT EXTENSIONS

The time in which default would occur has been put off as a result of our making available extensions to operators or, as I indicated in my statement this morning, some operators are now finding the conditions which we had imposed to qualify for extension being onerous.

We have required, for instance, full cash payment during the single year of extension which was made available back in April 1980.

Some people have done that, and were holding literally hundreds of thousands of dollars from some operators, and because they have not been able to operate, they are now finding it impossible to come up with the cash that would be required to extend additional contracts they hold.

So that is one of the reasons why we have asked the Comptroller General for his views on our authority to modify the conditions of extension to allow the purchasers to pay us interest at the going rates on the unpaid portion of the purchase price, rather than paying us the full unpaid portion of the price.

Mr. YATES. When did you ask the Comptroller General for that?

Mr. PETERSON. April 15.

Mr. BEASLEY. April 15.

Mr. YATES. So you wouldn't get an answer for a while. How many of the companies with whom you have contracts have gone into receivership or bankruptcy?

Mr. CROWELL. Virtually none.

Mr. YATES. None?

Mr. CROWELL. Although Rich Corporation, which is one which has just recently been in the newspapers——

Mr. YATES. That is a Chapter 11 reorganization?

Mr. CROWELL. They have mills in some of our——

Mr. YATES. I thought that was a retail organization.

Mr. CROWELL. They are primarily, but they have a couple of mills in California and some in Idaho; whether they have in Michigan, I am not sure.

Mr. YATES. Has legislation been filed in the Congress to permit the extension of the contract?

Mr. CROWELL. The extension of the contract is not something we require legislation for, but the termination provision would be.

Mr. YATES. Have you extended contracts?

Mr. CROWELL. Yes.

Mr. YATES. How many have you extended?

Mr. PETERSON. We would have to supply that.
[The information follows:]

CONTRACTS EXTENDED

The following tables provide the number of contracts extended by category by volume and by Regions:

I. Timber Sale Contracts Extended Under the Current "Soft" Extension Policies—Through April 30, 1982:

A.—UNDER TERMS OF FIRST "SOFT"[1] EXTENSION POLICY—MAY 23, 1980

Region	Number of sales through April 30, 1982	Remaining volume (Million board feet)	Remaining value
Northern	61	88,108	$5,646,183
Rocky Mountain	37	36,679	1,153,996
Southwestern	4	1,457	127,171
Intermountain	48	37,210	1,053,363
Pacific Southwest	32	76,332	12,126,948
Pacific Northwest	162	104,234	19,024,505
(Eastern)	(50)	(32,785)	(2,541,982)
(Western)	(112)	(71,449)	(16,482,523)
Southern	47	32,761	3,076,739
Northern	186	60,689	1,086,370
Alaska	0	0	0
Total	577	437,470	43,295,275

[1] "Soft"—Granting of additional time due to current economic situation, which is outside normal contract requirements for extension.

Note.—May 23, 1980, extensions were 1-year extensions.

B.—UNDER TERMS OF SECOND "SOFT" EXTENSION POLICY—OCTOBER 15, 1981

Region	Number of sales through April 30, 1982	Remaining volume (Million board feet)	Remaining value
Northern	21	39,933	$2,304,593
Rocky Mountain	31	42,143	811,621
Southwestern	14	18,964	1,227,405
Intermountain	43	47,326	1,485,084
Pacific Southwest	83	292,536	42,672,414
Pacific Northwest	321	737,640	161,441,166
(Eastern)	(85)	(225,346)	(30,753,090)
(Western)	(236)	(512,294)	(130,688,076)
Southern	36	39,430	4,950,086
Northern	121	46,497	626,233
Alaska	0	0	0
Total	670	1,264,469	215,518,602

Note.—October 15, 1981, extensions are 2-year extensions.

C.—CONTRACTS UNDER "B" ABOVE WHICH WERE ALSO UNDER "A" ABOVE

Region	Number of sales through April 30, 1982	Remaining volume (million board feet)	Remaining value
Northern	6	3,779	$154,383
Rocky Mountain	5	5,432	138,683

C.—CONTRACTS UNDER "B" ABOVE WHICH WERE ALSO UNDER "A" ABOVE—Continued

Region	Number of sales through April 30, 1982	Remaining volume (million board feet)	Remaining value
Southwestern	1	80	3,800
Intermountain	12	7,497	111,183
Pacific Southwest	6	18,066	4,483,640
Pacific Northwest	46	54,087	13,115,247
(Eastern)	(15)	(26,491)	(3,644,703)
(Western)	(31)	(27,596)	(9,470,544)
Southern	7	4,846	291,061
Eastern	58	24,041	259.894
Alaska	0	0	0
Total	141	117,828	18,557,891

Note.—These are contracts that qualified for both 1 and 2-year extensions and are a part of volumes and values in other tables.

OVERSTATED ESTIMATES OF TIMBER QUANTITIES

Mr. YATES. Let's talk now about the House investigative study for which we received a reply from the Service this morning.

Our Appropriations Committee of the House looked at Forest Service timber sales and analyzed their contracts in Region 6. They concluded that the Forest Service estimates of the quantity of timber to be sold are overstated as much as 18 percent.

The estimate may also apply to estimates of uncut timber under contract.

You say in your reply that the 45 sale sample isn't statistically sound and no reliable conclusions can be reached. What would happen if you adjusted the appraisals to take into account the credit systems that you allow on FS sales?

Mr. PETERSON. We have just changed our procedure for offering sales, effective April 15, to include more up-front money and so on. So we have eliminated the low cost of real sales to try to discourage this and get more order flowing.

Mr. YATES. You should have done that a long time ago.

Mr. PETERSON. The problem didn't arise with any significance until about 1978.

Mr. YATES. When the market went down?

Mr. PETERSON. Well, when inflation was so high and the problems in the Northwest caused problems.

Mr. YATES. What percentage of contract awards last year were awarded at the appraised value? Would you put that in the record?

Mr. CROWELL. By volume or numbers of contracts of both?

Mr. YATES. If you can give it to us both ways, we would appreciate it.

[The information follows:]

CONTRACTS AWARDED

The following table provides the number of contracts awarded in 1981 that awarded at appraised value, by volume and by Region:

FISCAL YEAR 1981 TIMBER SALE CONTRACTS WHICH WERE AWARDED (AND SOLD) AT THE ADVERTISED RATE.

Region	Number of sales	Volume sold [1]	Tract value
Northern	32	74,528	$1,488,167
Rocky Mountain	40	126,773	317,636
Southwestern	21	95,272	4,912,640
Intermountain	82	92,269	1,746,595
Pacific Southwest	33	45,608	789,953
Pacific Northwest	78	161,216	6,027,058
Southern	48	35,002	2,365,017
Eastern	113	77,708	2,630,231
Alaska	24	23,173	644,042
Total	471	731,549	20,921,339

[1] Million board feet.

BASIS FOR APPRAISALS

Mr. YATES. Why shouldn't the appraisals be based on the most recent value received by the willing seller from the willing buyer?

Mr. PETERSON. Let me try to develop that just a little bit. In our eastern regions, where we have a large private log supply, where there is a valid basis for using logs as an appraisal basis, we do that.

In the West, where you are dealing largely with public timber, there hasn't really been an independent transaction evidenced to work with. So we have appraised, based on the end products that would be used. Now, that process has worked reasonably well during periods of stable markets.

When it has really given us trouble is when people are bidding what they thought the market was going to be 3 to 5 years from now.

That causes what is called speculation.

LAND ACQUISITION

Mr. YATES. Your appropriations request for land acquisition is down by $7.5 million from last year. Do you not have the need to acquire lands.

Mr. PETERSON. This budget anticipates only the acquisition of lands which have already been contracted for, are already in court or something like that.

Mr. YATES. Is this for the payment of settlements?

Mr. PETERSON. It does not anticipate any new direct acquisition.

Mr. YATES. What acquisition problems do you have? Do you have any that would require money for this purpose?

Mr. CROWELL. There are some. This is an item——

Mr. YATES. Is this enough, is the $1 million enough?

Mr. CROWELL. This is the kind of item where the stretch-out of the objective can be accomplished without too great a dislocation. I am not saying there wouldn't be some dislocation, because, for instance, there are some subsurface rights that exist in wilderness areas, which were established by the Congress, and we are really under direction to acquire them some way, if that is at all possible.

We also have an obligation imposed as a result of the expansion of the boundary areas to acquire some of the many holdings there. And that is going to have to be slowed down and deferred during these times of budget crunch. The same kinds of situation exists with acquisition of lands in the Alpine Lakes Recreation Area. There are a number of things of that sort.

Mr. YATES. I know that you asked your Department for $36,630,000. The Department approved it, sent you over to OMB and OMB gave you the back of its hand. It approved only $7.5 million for that purpose. What was left out?

Mr. CROWELL. Well, mostly these things I have just told you about.

Mr. YATES. Does that make up about $27 million?

Mr. CROWELL. There may be some other things there, too, Mr. Chairman.

REDUCTION OF PROPOSED RESEARCH BUDGET BY OMB

Mr. YATES. Let's see what happened with OMB. We already discussed forest research. I had assumed reduction for forest research was $12 million. But I look at this other chart which indicates that the total for forest research had been reduced by roughly $28 million.

Mr. PETERSON. The 11 percent that we were referring to is the difference between 1982 appropriations and the 1983 present request. What you are looking at is the request of OMB versus the OMB allowance.

Mr. YATES. That is what I am looking at. Dr. Buckman, before you pack, can you tell us or would you place in the record, a list of the projects that you asked the Department for which were dropped when OMB approved a $28 million reduction?

Mr. BUCKMAN. Yes, sir; we will provide that.

[The information follows:]

RESEARCH PROJECTS AFFECTED BY REDUCTION

The Forest Service conducted a thorough examination of the entire research program. We evaluated each research project against a set of criteria. The criteria used to make project selections include: (1) relationship to mission/goals of USDA and the Forest Service; (2) importance and timeliness of research; (3) impact of research; (4) quality/productivity of research; (5) personnel, funding and cost of operations; and (6) status of research essentially completed, nearing completion, can be postponed). From that analysis, we select an array of projects which we believe to be most relevant and current while meeting the priorities of the Administration.

The following research programs will be terminated in order to help reduce Federal spending and the Federal deficit: basic research on wood formation and growth; silviculture of ponderosa and lodgepole pine in the Pacific Northwest; development of planting stock for the northern Great Plains; multiresource management of forests in the Ozark-Ouachita Highlands; silviculture and tree improvement of eucalyptus in Florida; wildlife habitat management in the southern Great Plains; ecology and management of pinyon-juniper woodlands in the Great Basin; integrated resource management in the Cumberland Plateau region; intensive culture of northwest California conifers; biology and control of forest insects in California; national resource inventory techniques; management alternatives for pines of the southern Coastal Plain; maintenance of native Hawaiian forest ecosystems; ecology and silviculture of Rocky Mountain Douglas-fir and ponderosa pine; insects of northern Rocky Mountain forest trees and wildlife shrubs; economic analysis of southern wood exports and harvesting technology; land treatment of sewage effluent and sludge on forests; insects of natural forests; fire prevention technology for the South; genetics and breeding of southern hardwoods; lightning phenomena; integrated control of southern forest insects; dispersed backcountry recreation; economics of northeastern hardwoods; virus and virus-like diseases of native trees; silviculture and sap production of sugar maple forests; wildlife habitat management in the central Appalachians; basic research on wood anatomy, quality and yield improvement in wood processing; physiology and raw materials evaluation of short rotation intensively cultured plantations; evaluation of desert land productivity and value; silviculture of northern hardwoods; and intensive soil and stand management practices for southern pines.

REDUCTION OF PROPOSED STATE AND PRIVATE FORESTRY BUDGET

Mr. **Yates**. For State and private forestry, you asked the Department for $73 million, the Department gave you $53 million, and OMB cut that by another $5.7 million. That is a significant cut, too. You don't have any friends over at OMB at all, do you?

Mr. **Crowell**. They have their problems, too, as you know, Mr. Chairman.

Mr. **Yates**. It looks like they unloaded some of their problems on you.

Mr. **Crowell**. Well, we hoped that it was proportionate.

Mr. **Yates**. That is the question in my mind as to whether or not OMB singled out the Forest Service for a particular reduction. Would you put in the record the projects that were dropped as you went from the Department to OMB? The Department doesn't like you, either, does it?

They cut $20 million out of State and private forestry before they sent you to OMB and OMB cut you another $6 million.

Let's find out for the record what was dropped en route.

[The information follows:]

State and Private Forestry Reductions

The reductions in State and Private Forestry programs are shown below and reflect the need to rely more on the States and the private sector to improve the management of State and private forest lands.

[In thousands of dollars]

Budget line item	Agency request	Department request	Reduction	President's budget	Reduction
Forest pest management	$23,449	$16,825	$6,624	$16,790	$35
Rural fire prevention and control	15,632	14,390	1,242	14,380	10
Rural forestry assistance	24,663	15,285	9,378	12,375	2,910
Assistance in management, planning and technology implementation	6,824	3,679	3,145	975	2,704
General forestry assistance	3,000	3,000	0	3,000	0
Total	73,568	53,179	20,389	47,520	5,659

PROPOSED NATIONAL FOREST SYSTEM BUDGET

Mr. **Yates**. Then we come to the National Forest System. Well, you weren't hurt too badly there. Request of the Department was $1,329,000,000, the Department gave you $1,289,000,000, and OMB cut you only to $1,183,000,000.

Well, that cut you by $100 million. Where are you hurt there? Are you going to tell me you are not hurt? You are not hurting at all, right?

Mr. **Peterson**. Like Dr. Buckman, I am an advocate for the Forest Service but I don't have to make the judgments of how to balance the national budget, pay for the national defense——

Mr. **Yates**. But you have to be responsible for the Forest Service.

Mr. **Peterson**. Yes, I do.

Mr. **Yates**. Are you going to be able to operate the National Forest System with all of the things you have to do with the amount of money that you have lost in the National Forest System?

Mr. **Peterson**. We will be able to operate the National Forest System. It is obvious we won't do everything in 1983 we did in 1982 or 1981.

We have gone through a very deliberate process of looking at things that could be delayed, it was thrashed out and we have already mentioned some of them.

Mr. **Crowell**. We also have used this as a spur to look for efficiencies and I think the Forest Service is to be commended for the efforts that they have made along these lines, clarifying that we can manage things a bit more efficiently.

Mr. **Yates**. Good for you. Witnesses from other Agencies who have come and testified before us in response to this kind of a question said, "We are streamlining our Agency." They also said, "Well, Mr. Chairman, we have got to be smarter." I suppose you are going to have to smarter, aren't you?

Mr. **Peterson**. Yes. But we have taken some very specific action. We reduced our——

Mr. **Yates**. Where were the cuts made? Where are you hurt the most by this $100 million cut?

BREAKDOWN OF NFS LINE ITEM BUDGET REDUCTIONS

Mr. **Peterson**. Well, if you want—have you got an item breakdown?

Mr. **Yates**. Yes, so you better tell the truth.

Mr. **Peterson**. The biggest item is land management, you know that there is a reduction of $11 million there. That will mean that we will not make as many land exhanges as we had planned to make.

LAND EXCHANGE

If you know the acreage, that is about cut in half, so it will slow down some land exchanges. I mentioned earlier this morning that one of the areas of concern is these uses by others that are imposed on the national forests, the pipeline, the powerline, the road that crosses the national forest and so on.

We have some problems in that area.

FOREST FIRE PROTECTION

Mr. **Yates**. All right. Let me ask you a question on forest fire protection. You start out with $165 million, the Department says, you are right, that is a goodly sum, but we will go along with you and OMB strikes $15 million out of there. That is not really a cut, is it?

Yes, it is a cut, because that is fuel treatment, that is the fire breaking, and so on.

Mr. Peterson. That is fuel treatment work that will be delayed.

Mr. Yates. Will that jeopardize your forest?

Mr. Crowell. There is a risk as you perceive.

Mr. Yates. Why take that risk in this? Why not cut other things?

Mr. Crowell. The risk is that we might end up incurring more costs for fighting forest fires. But if we are lucky, we won't have the forest fires and we can get away with having reduced the forest fire protection.

Mr. Yates. That kind of an analysis is not justified when one considers the amount of fires you have had the last 4, 5 or 6 years is it? You have had a lot of fires, haven't you?

Mr. Crowell. We always have a lot of fires, when you administer 190 million acres.

Mr. Yates. Shouldn't you be taking the steps that are needed to protect the forest? $15 million, does that mean very much to you?

Mr. Crowell. It is about 9 percent of the total amount.

Mr. Yates. That raises a question in my mind. You asked the Department for $165 million. How much were you allowed last year for this?

Mr. Crowell. By Congress? It was $140 million.

Mr. Peterson. $140 million.

Mr. Yates. Well, you had $140 million last year, why did you ask for $165 million?

Mr. Peterson. Last year, if you remember, there were several budget reductions made in the process. We ended up with very little fuel work in last year's budget. So we are trying to keep fuel work and fuelbreak working and we have some of that in this budget.

Mr. Yates. What did you have for this account in 1981?

Mr. Rice. $141 million.

Mr. Yates. Apparently you came to the conclusion you needed much more fuel work, didn't you?

Mr. Peterson. We have had a long-term priority of trying to reduce fuels as a way to reduce long-term fire costs. Unfortunately, you never know for sure that where you put those fuelbreaks is where you will have the fires the next year.

Mr. Yates. You are the more expert people in that field. That should be done, shouldn't it?

Mr. Peterson. Whenever we can do it, yes.

Mr. Yates. If you were sitting on this side of the table, would you put the extra money in that OMB took out?

Mr. Crowell. I don't think so. Given the other concerns that you have on that side of the table, as well as OMB, and we, in trying to balance the Federal budget and trying to assign priorities for all of the myriad things that place demands on the Federal Treasury.

Mr. Peterson. I think the fire protection item is an important one.

Mr. Yates. It is roughly $8 or $9 million more than it was the previous year and the year before that. Now, you concluded after the fire season that that was not enough money so you asked your

Department for more money. You probably could use more money than the $165 million, couldn't you?

That was a reasonable cutdown, wasn't it? That was a cutdown figure, too.

Mr. **Peterson**. There is a lot of fuelbreak work out there we would do over time. It is always a question of how much you do in any one year.

Mr. **Yates**. Do you do your fuelbreak work in-house or contract it out?

Mr. **Peterson**. The bulk of it would be contracted, although we use some of our fire crews to do that work.

Mr. **Yates**. How satisfactory do you find the contracting out?

Mr. **Peterson**. Usually quite satisfactory.

Mr. **Crowell**. We change contractors.

Mr. **Peterson**. We have a good set of specifications.

FOREST FIREFIGHTING

Mr. **Yates**. I am concerned about fire protection because if memory serves me right, the amount of money that we have been paying out after the fact to take care of the fires has been going up every year, hasn't it?

Mr. **Peterson**. This year, the request is down, 76——

Mr. **Yates**. I don't mean the request, I mean the actual payouts for the cost of having fought the fires. The money we put in following the fires.

Mr. **Peterson**. What I am saying is our request for supplemental this year for fighting fires is only estimated at $76 million, which is quite a bit below the other years.

Mr. **Yates**. That is a guess?

Mr. **Peterson**. That is my best estimate.

Mr. **Yates**. But is that based on budget constraints, too?

Mr. **Peterson**. No, that is our best estimate.

Mr. **Yates**. Based on what the actual costs are going to be?

Mr. **Peterson**. Based on our projection. Right now, we have got snow cover and moisture conditions that are quite a bit better this time of year than they have been in several previous years. We do have some problems in the East and Southeast.

Mr. **Yates**. I remember your testimony one year saying because of the moisture and rain, and so forth, there was so much additional growth it increased the fire hazard.

Mr. **Peterson**. That can happen in grass-covered areas when you get a heavy growth of grass in the spring. But that isn't true with any of the forestry areas.

Mr. **Yates**. You have to worry about grass fires, too, then?

Mr. **Peterson**. Yes, sir.

ROAD MAINTENANCE

Mr. **Yates**. Let's look further. Forest road maintenance you are cutting from $74 million to $61 million. Do you have to worry about increasing the amount of board feet that are going to be cut and decreasing the amount of money available for forest roads?

Mr. **Crowell**. The purchasers will do most of the road maintenance involved with their timber harvests.

Mr. **Peterson**. What we will do in this case, Mr. Chairman, as we have already done, is close some more lightly used roads, particularly during the wet weather, to try to prevent maintenance expenditures.

REFORESTATION

Mr. **Yates**. Reforestation was cut $10 million. Or am I misreading it? Were you cut by $10 million?

Mr. **Crowell**. Cut about $7 million. No, reforestation and timber strand improvements you are talking about. If you look just at reforestation, $7 million.

Mr. **Yates**. Is that going to hurt you?

Mr. **Peterson**. What we will do in this case, as I mentioned this morning, is to continue to plan on eliminating backlogs by 1985. Now, we had a program of about 210,000 acres last year and 109,000 acres this year. Our program will vary between those two numbers, I would guess, as we complete the backlog.

WILDERNESS MANAGEMENT

Mr. **Yates**. Wilderness management is cut by $2 million.

CULTURAL RESOURCE MANAGEMENT

Then you have cultural resource management cut by $4 million, a significant cut. What is that item? What does it include?

Mr. **Peterson**. Cultural resource management is inventorying of historical and cultural resources on our lands. We have had a major effort there as we did our land management planning.

This will result in some stretchout of that activity.

Mr. **Yates**. By how many years?

Mr. **Peterson**. That is actually an increase over 1982 appropriations.

Mr. **Yates**. Why ask for $10 million, then?

Mr. **Peterson**. There is some efficiency in getting this done faster since we have got the information up front before you get into an area and then have to back out.

We thought maybe we should finish it earlier.

Mr. **Yates**. OMB didn't agree with you?

Mr. **Peterson**. It may cost a little bit more over time, but in an inflationary situation it is a reasonable thing to do.

What is the effect of the stretchout?

What happens to cultural management? If you ask for $10 million to get it done and OMB says no, take $6 million. What is lost?

Mr. **Peterson**. If we get an oil and gas lease application, for example, and we have an inventory in an area, we can handle that very rapidly. If we don't have an inventory in that area, when we get the oil gas lease application, we will have to do it at that point in time.

If you do it by smaller areas, it will cost you more over a long period of time. But we will still get the job done.

Mr. **Yates**. Okay.

WILDLIFE AND FISH HABITAT

Then you have wildlife and fish habitat. You lost $6 million in total, including $8 million in administration.

What suffers there?

Let's talk about administration. Are you attriting, or RIFing people in management administration?

Mr. **Peterson**. We will keep generally the same number of people we have now.

Mr. **Yates**. But you lost $8 million.

Mr. **Peterson**. We have about the same budget this year as we had last year.

Mr. **Yates**. Why did you ask for $26 million?

Mr. **Peterson**. One of our reasons for asking for the increase was there is a large amount of wildlife habitat work that is particularly related to fish that is quite cost effective if we had the money to do it.

Mr. **Yates**. It is just going to cost you more in the long run?

Mr. **Crowell**. It wouldn't cost more, but there would be forthcoming benefits that could be realized if we made the investments now.

Mr. **Yates**. How much are you losing by that practice?

How much more will you have to spend?

Mr. **Crowell**. The only amount more we have to spend is what might be added as we go with inflation, but who knows at this point? We hope it is coming down.

RANGE MANAGEMENT

Mr. **Yates**. Range management went from $31 million to $24 million, a $7 million cut in total. What is going to suffer there?

Mr. **Crowell**. That is actually the 1981 and 1982 appropriation, $26 and $27 million at that point, for comparison purposes. That does not represent an actual reduction and what it would be, basically, would be some improvement.

Mr. **Yates**. Here you have MM AUMs along side, what does that mean?

Mr. **Peterson**. Million animal-unit months.

Mr. **Yates**. How is that affected by this cut?

Mr. **Peterson**. It is not affected. We will remain the same, the objective was to increase.

There is some money in the Range Betterment Fund, but this is some reduction in what we would otherwise have done in construction.

Mr. **Yates**. What have you lost in receipts?

Mr. **Crowell**. Receipts would be the same from the animal unit months. There is, de facto, a reduction in the actual payment per animal month as a result of the formula prescribed by the Range Improvement Act of 1978. So our receipts from grazing will be down in 1982 from what they were in 1981.

We don't know what they will be in 1982.

CONSTRUCTION

Mr. YATES. Let's look at your construction account. The total for construction is $576 million. Construction of facilities for $36 million, road construction for $266 million, and timber purchaser construction for $268 million. Why is timber purchaser construction included in there?

Mr. PETERSON. At the time we made the request to the Department, timber purchaser credits still had to be appropriated. Congress made the change so that is now off-budget. So between the time we made the request, and the time we sent up the budget, there was $291 million of timber purchase credit in the Department.

Mr. YATES. How much of this is off-budget? Roads is off-budget, too, isn't it?

Mr. PETERSON. No, just purchaser credit.

Mr. CROWELL. You understand how that works, Mr. Chairman. In effect, the purchaser builds the road at his expense, but then he is allowed to pay for timber with the estimated amount that he has paid out.

It is not his actual amount, it could be a little over or a little under, but paid on the basis of the statement at the time the contract was appraised.

Mr. YATES. You move from $576 million down to $297 million. Is that an apt comparison?

Mr. PETERSON. No, it is not. For a better comparison here, you need to deduct $291.7 million from $576 million.

Mr. YATES. Why are we deducting that figure?

Mr. PETERSON. That is purchaser credit.

Mr. YATES. That is in the next item?

Mr. PETERSON. No, no.

Mr. YATES. Suppose you tell us what it is. Take us through this labyrinth, will you?

Mr. PETERSON. The request of the Department was $576,158,000. At that point there was $268,853,000 in the purchaser credit. The request went to OMB, when we scrubbed it at that point, we showed $266 million appropriated funds, $291 million for purchaser credit.

When it came back from OMB, the request to Congress was $271 million, so there is really only a $5 million change.

Mr. YATES. That is up?

Mr. PETERSON. That is up, purchaser credit is down, it is a tradeoff there. We are trying to find an efficient way there.

LAKE TAHOE ACQUISITION

Mr. YATES. The land acquisition, we have already gone into, haven't we? Lake Tahoe acquisition, you don't want any money for that, do you?

Mr. AUCOIN. Mr. Chairman?

Mr. YATES. Mr. AuCoin?

CHANGES IN 10-PERCENT FUND

Mr. AuCoin. Could I ask a question on roads? I have two questions.

Last year, Chief, as you recall, this committee made some changes in the 10 percent funds appropriation. I think we all remember the chaos in trying to predict what was going to be in it, the industry was vexed and the regional foresters were confused. It was a state of chaos.

What we ended up doing was appropriating based upon what we expected receipts to be. That payment was to be repaid by the receipts. To what degree has this subcommittee's action brought some stability and clarity to the situation?

Are you satisfied or do we need to look at this problem further this year?

Mr. Peterson. That was a very helpful change, because previous to that time, if we guessed too high on what the receipts were going to be, then we didn't have the money at the last minute. If we guessed too low, and receipts came in, we still didn't have it.

It tends to average out over time, but this has helped prevent lots of stops and starts in the program in the region, so it has been a very helpful change.

In fact, we have a legislative proposal that is up here now, that would permanently make that change.

Mr. AuCoin. What is the disposition of that proposal?

Mr. Peterson. Pending up here now, it has not been introduced, but it has been submitted by the Administration to make a permanent change.

Mr. AuCoin. You suggest no improvements to what this subcommittee did last year? The appropriations bill has basically taken care of the problem?

Mr. Peterson. I guess if it doesn't get handled legislatively, this committee could handle it the way they did last year until the time the legislation passes. It would be very helpful, because it would be impossible right now to predict for 1983 what the receipts will be.

Mr. Yates. What is it you want this committee to do?

Mr. Peterson. You remember we had a separate 10 percent of receipts for roads and we had to guess at that amount each year. What you did last year was appropriate the 10 percent or estimate of 10 percent and then when money came in, it went into the Treasury.

If you will continue that process next year, we may get more efficient in administering the funds.

Mr. Yates. The committee does some good work, I guess.

Mr. AuCoin. Chief, I would appreciate visiting with you personally about this after the hearing. As you recall, I put a great deal of work, into this proposal to the subcommittee last year.

I would like to know what the disposition of the legislative request is.

ROAD CONSTRUCTION PROPOSED INCREASE

One other question on roads. There is a $38 million increase proposed in this budget for roads, not purchaser credit or your road program. How much of that $38 million is needed to produce your 12.3 billion board foot timber sales request?

Mr. **Peterson**. Well, this is related not just to the 1983 sale program but the 1984 and 1985. So quite a lot of this is directed towards the advance work for 1984 and 1985.

Now we have a breakdown of how much was spent for which sales and which year but a large part of that is for future years.

Mr. **AuCoin**. Could you provide that information to the subcommittee, for the record?

Mr. **Peterson**. Yes.

[The information follows:]

ROAD CONSTRUCTION PROPOSED INCREASE

The proposed increase in forest road construction in fiscal year 1983 is due to the proposed increase in the timber sale preparation volume from 11.0 billion board feet in fiscal 1982 to 12.3 billion board feet in fiscal 1983 and beyond.

The proposed increase provides for the presale engineering, design and construction contracts for timber access roads in fiscal 1984 and beyond. Access into presently unroaded areas of the National Forest System is an important forerunner to placing land under management and bringing it to its full production potential.

The $38.7 million increase over fiscal year 1982 provides the additional 439 miles of new access needed for the planned increase in timber sale levels in future years. Dollars will be spent for preconstruction engineering, design, and supervision of road construction (7.8 million) and for road construction contracts ($30.9).

This access into unroaded areas will provide about 450 million board feet of timber in 1984 and beyond.

Mr. **Crowell**. Remember the engineering of roads is paid for out of this, which is in 1983 which would have an effect on sales in outyears.

Mr. **AuCoin**. This $38 million increase is only for engineering for those years?

Mr. **Crowell**. No, I am not saying that. A portion of $72 million would be engineering and that accounts for a lot of the reasons why the impact would be in years other than in 1983.

Mr. **AuCoin**. But your request of this subcommittee is for us to approve the $38 million increase over last year which would be full funding for the road program in fiscal 1984 and 1985.

Mr. **Crowell**. No, no, it wouldn't be full funding. It would be the funding needed in 1983 to get roads which would be built in 1983 with appropriated funds, as well as the engineering work which needs to be done for sales that are going to be made in 1984 and 1985. But the work would be done in 1983.

Mr. **AuCoin**. Is this an unusual request or has this typically been done over the years?

Mr. **Peterson**. Actually, the $38 million difference is related to the increase in timber output. Now, I might point out that we did make a special effort last year to reduce the cost of roads. We actually reduced the cost of roads $33 million over what our original estimate was.

If we had continued the road estimates in 1983 the budget would have been another $65 million. So we are squeezing that to try to prevent that.

Mr. **AuCoin**. Spend some now and beat inflation, is that it?

Mr. **Peterson**. We are trying to reduce the cost by taking a hard look at reconstruction roads to use them as they are.

In some cases we are not providing surfacing. These roads will be used during dry weather and not be available during wet weather.

We are taking actions to try to decrease the outlay.

Mr. AuCoin. You don't need the $38 million for the 12.3 million board-feet for fiscal 1983?

Mr. Peterson. If we don't have the $38 million then we fall off a cliff for 1984 and 1985. So we would either have to reduce the 1983 sale program or dramatically reduce the 1984 and 1985 program.

Mr. Crowell. Making it up in 1984 and 1985 wouldn't cure the problem. The work has got to be done with that kind of lead time.

Mr. AuCoin. Chief, did you have something else to say?

Mr. Peterson. As you are well aware, because of the climatic situation, unless you do the field work for the 1984 and 1985 construction season in 1983, you simply can't make it up by having a later appropriation.

In order to provide for an orderly program, you simply have to do it a year ahead.

MR. CROWELL'S OPERATING STYLE

Mr. Yates. Mr. Crowell, you have been breaking into print.

Mr. Crowell. I have been doing that a lot lately.

Mr. Yates. Well, this is the December 26, 1981, Idaho Statesman article and it says that you have a different style than Secretary Watt. He welcomes the fights and you kind of make the changes without the fights.

Have you seen this article?

Mr. Crowell. I think I probably have. I wonder if Mr. McDade would agree with that.

Mr. Yates. "The mining and drilling and logging that Watt wants to step up on many Interior lands matches Crowell's goals for the National Forests. And when Federal land reforms of the Reagan administration are written as history, some environmentalists believe, Crowell would be portrayed as the near-equal of Watt."

That is pretty powerful.

"Today, that is doubtful. Watt holds Cabinet rank, Crowell does not. Including Bureau of Land Management properties and the national parks, Watt manages 770 million acres or one-third of the Nation's land base, plus off-shore oil drilling. The National Forests under Crowell total 190 million acres."

It says you invited the controversy because your personality is so bland. I don't think he flattered you. I don't think Mr. McDade would agree with that either.

"Otherwise, Crowell would be known nationally the way Ann Gorsuch is known." Now, there is some good company.

"Peter Kirby of the Wilderness Society said, he has set in motion a lot of major policy shifts that will become controversial next year."

Well, here we are in next year if this is dated December 26th. What policy shifts have you put in that are going to become controversial, increasing the cut?

Mr. Crowell. That is one of them, Mr. Chairman.

Mr. Yates. What are the others? They say that you are a bear for eliminating regulations.

Mr. CROWELL. I think it relates primarily to the fact that I have long espoused increased cutting levels on the National Forests for some of the reasons I went into this morning.

We have a big inventory out there that ought to be utilized. It isn't wise conservation to allow it to rot. I have advocated that it ought to be earning a big return on investment as represented by that inventory and I have moved in that direction.

Now, it is true that I haven't done it with cannon fire and bombs, but I think that we have got to do it with concern for sound environmental protections. They aren't doing it with a lot of bombast but it is something that can be and should be done and it would be of benefit to the American public, as we proceed, to do it.

TIMBER HARVEST OF OLD-GROWTH DOUGLAS FIR

Mr. YATES. Well, it says here that you are a "Harvard-educated lawyer who has concentrated during the Administration's first year in altering Forest Service regulations thus avoiding battles which would ensue if he asked Congress for changes in the law.

"A major item is revision of forest management plans to increase logging, perhaps 15 percent more, as soon as 1983, mainly from old-growth Douglas-Fir in the Pacific Northwest."

Now, as one who isn't a forester, tell me why that is criticized. It says here, "That probability has some State officials, particularly in the West, fearful that game habitat and stream quality for fish will be seriously damaged."

How does that follow?

Mr. CROWELL. Well, I think the concern is overstated and misrepresented when put in the context that the increasing of the timber harvest from the National Forests is going to have adverse effects on fish and wildlife and recreational use and others of the multiple uses to which the National Forests are put.

Mr. YATES. Will it have that effect on what the article describes as old-growth Douglas-Fir?

Mr. CROWELL. Well, much of the harvesting will have to occur in old-growth. Something like 65 percent of the stands in the West are timber that is over 200 years old, as I recall.

Mr. YATES. Why hadn't that been harvested before?

Mr. CROWELL. Well, we haven't really had the demand for it in this country. We met our wood needs with timber from other sources.

Mr. YATES. Do you have the demand this year?

Mr. CROWELL. Not necessarily this year. What I was saying this morning was that we expect to have it over the next 3 or 4 decades. This relates to the statement that I also gave this morning about the fact that we have 50 percent of the standing softwood inventory in the United States, which is on the 89 million acres of commercial forest land in the National Forests.

VALUE OF OLD GROWTH

Mr. YATES. Well, as one who hasn't seen this, perhaps I should have gone out to look at it, I have a picture in my mind when we talk of old-growth, of a stately forest like the Sequoia, for example, a stately forest of Douglas-Fir that is 200 years old.

My goodness, shouldn't we treasure it rather than cutting it down? Shouldn't we look to other growths and keep these marvelous forests that are so stately?

Mr. **Crowell**. We will be doing that with the set-asides of national parks that we have. We have several million acres set aside in the Olympic National Park, Mount Rainier and Glacier National Park, Crater Lake National Park, Redwood National Park.

Even with all of that acreage and old-growth set aside in those parks, the Forest Service doesn't intend to liquidate all of its old-growth either.

We will be managing it for some of the species which require old-growth habitat.

Mr. **Yates**. Would you tell me what that means, "some of the species which require old-growth habitat?"

Mr. **Crowell**. Well, there are some species which depend on old-growth habitat for the place where they live.

Mr. **Yates**. What do you mean by "old-growth habitat?" What is characteristic of old-growth habitat? Is it a mountainous area or a level area?

Mr. **Crowell**. Well, it would be any place where you have trees that are 200 to 450 years old.

Mr. **Yates**. Old-growth habitat is wherever those trees happen to grow?

Mr. **Crowell**. Yes.

Mr. **Yates**. Will they grow anywhere else?

Mr. **Crowell**. You mean the species?

Mr. **Yates**. Yes.

Mr. **Crowell**. No. They would be dependent on that kind of place.

Mr. **Yates**. Well, the thought comes to my mind, then, if we cut them down they will never grow again.

Mr. **Crowell**. The trees would grow again, but it would be under management at that point where you probably wouldn't have them grow up to become 250 years old again, probably.

Mr. **Yates**. Is there an advantage to having trees that are 250 years old because they grow to a certain size with that age or they grow to a certain kind of beauty with that age?

Mr. **Crowell**. There is no economic advantage to it. There would be an advantage from the standpoint of the kinds of wildlife that have a special niche requiring old growth habitat. And, as I say, we have no intentions of eliminating all that kind of habitat.

Mr. **Yates**. Is that like a bank account that you keep in reserve in case you need it at some future time?

Mr. **Crowell**. That is the way we have been treating it. The National Forest inventories has been a bank account increasingly that has not been earning interest.

Mr. **Yates**. Except for the people who go there and enjoy it as tourists.

Mr. **Crowell**. It would have that sort of a payoff, too.

Mr. **AuCoin**. And the wildlife, Mr. Chairman, who depend on that for their habitat.

Mr. **Crowell**. That is probably why the people go there.

Mr. Yates. Then my impression is fairly accurate. It is kind of like the beauty of the Sequoia. You don't want to cut down the Sequoia?

Mr. Crowell. No. I couldn't do it anyway. They are not mine.

Mr. Yates. They are part of the National Park System you mean? Would you do it if you could?

Mr. Crowell. No.

Mr. Yates. We will put that in the record.

Mr. Crowell. Mr. Leisz reminds me that we actually do have some Sequoia next to the park. I honestly don't know why we are managing them.

Mr. Yates. What are you going to do, are you going to cut those down?

Mr. Leisz. No, we are continuing to manage those to perpetuate the old-growth giant Sequoia and to encourage the establishment of new giant Sequoia. It is working quite well.

Mr. Yates. How long does it take a new Sequoia to become an old Sequoia?

Mr. Leisz. Hundreds of years.

AGE CLASSES OF TREES

Mr. Yates. Is it an achievement to keep a forest of trees that have achieved 250 years of age?

Mr. Leisz. I think the fascination here is to have the full span of age. Any of the trees, really, by species, have certain age classes that they go through.

Mr. Yates. What is an age class?

Mr. Leisz. Some mature at a much earlier time period than others. Some are pretty short life species. The lodgepole pine reaches maturity before 100 years and it dies.

Mr. Yates. These are Douglas Firs, aren't they, in the old-growth forest?

Mr. Crowell. Normally when we talk about old growth forests we are talking about Douglas-Fir forests. But you could also refer to lodgepole pine.

Mr. Yates. The old-growth of the pine comes at 50 years and the Douglas Fir takes 150. And if you cut it down it will take another 150 years to grow that?

Mr. Crowell. Yes, back to the same kind of forest you had before but economically you would probably want to cut the Douglas-Fir at the age 60.

Mr. Yates. I had better go out and look at it if I ever want to see it again. I had better take my grandkids out there.

Mr. Crowell. We would like to have you do that, Mr. Chairman.

OLD-GROWTH STANDS

Mr. Leisz. In our land management we have identified that each of the forest types in individual forests have plans to retain characteristic old-growth stands.

Mr. Yates. How much do you have and how much do you propose to cut down?

Mr. Leisz. This would vary by individual forest plans and by the species that you are working on.

Mr. YATES. You are talking about old-growth now?

Mr. LEISZ. Yes.

Mr. YATES. How many acres of old growth do you have? Let's say old-growth Douglas Fir?

Mr. CROWELL. Probably about 10 million acres.

Mr. YATES. How much would you propose to keep and how much would you cut over the next few years?

Mr. LEISZ. May we develop this for the record because we would be guessing at this point and I feel uncomfortable guessing.

Mr. YATES. Well, develop it for the record, but let us know ahead of time. You know sometimes the information for the record isn't provided until after we mark up and I want to know prior to mark up what your plans are with respect to the old-growth. I want to know what you propose to do with your Douglas-Fir old-growth forest and your lodgepole-pine old-growth forests and so forth.

Also, what effects the cutting may have on the environment as my colleague has pointed out, the effect on the land, the wildlife, the tourism, and so forth. I think these are implicit, if not specific, in the legislation that Congress has passed as being part of the duties and responsibilities of the Forest Service.

Mr. CROWELL. That is correct.

Mr. LEISZ. Mr. Chairman, one of the issues that has come up here that many people believe that an old-growth forest is a static situation, it simply remains as such for an indefinite period of time and that is not the case.

The different species become mature at different ages.

Mr. YATES. You pointed that out in the case of the lodgepole pine.

Mr. LEISZ. They mature and then other species come in and take their place. So we see, over a long period of time, finally the species occupying the site but going through many successions of trees——

Mr. YATES. Where would I read about this? Are there things I can read about this?

Mr. LEISZ. Yes, sir. I would be glad to furnish them to you.

Mr. YATES. I find it very fascinating.

[The information follows:]

OLD-GROWTH INFORMATION

One of the most recent and comprehensive reports on old-growth is, "Ecological Characteristics of Old-Growth Douglas fir Forests," by Jerry Franklin et al., General Technical Report PNW-118, February 1981. This 48-page report has been furnished to the Chairman as he requested.

Mr. PETERSON. Rather than providing a bunch of statistics for the record which may not mean very much, my proposal is to take a recent land management plan like the Lolo National Forest plan and show you the alternatives that are considered and how they treated the old growth plan.

Then you can visualize it. It is the same place with the different species of trees.

OLD-GROWTH FORESTS

Mr. YATES. I still want to know your plans for old-growth forests.

Mr. CROWELL. We don't want to give you specifics because the planning processes are carried out individually on each National Forest and that process won't be completed until the end of 1984, but we have some guidelines.

Mr. YATES. Well, does that mean that you are not going to cut old-growth forests for 1983?

Mr. CROWELL. No. A lot of these forests don't have anything but old-growth in them. We would be harvesting an old-growth as we have in the past.

Mr. YATES. But you have asked the subcommittee for funding to permit a cut of 12.3 billion board feet. Do you know where you are going to cut?

Mr. CROWELL. Yes.

Mr. YATES. I want to know where you are going to cut and I want to know what portion of the cut is from old-growth forests and what kind of old-growth forests they are.

I also want the information for the 1984 cut and 1985. Let me ask you, how far into the future do your plans for cuts go?

LAND MANAGEMENT PLANS

Mr. PETERSON. The land management plan, which is the basic plan, is from 10 to 15 years. It projects conditions out about 50 years, at least.

Mr. YATES. So do you know approximately what the amount of the cut you are going to ask for for 1984 or 1985 is likely to be?

Mr. PETERSON. The amount of cut we ask for in a particular year depends a lot on the economy for that year. We will determine what we will produce over a long period of time through the land management plan.

That is the reason I think if you looked at a specific plan you would be able to get your statistics.

Mr. YATES. Well, give me everything you want to give me because I like to read and I would like to inform myself on this. Who knows, maybe I will go out there and take a look at an old-growth Douglas-Fir forest and take a look at some Sequoia, too.

Would you rather I look at the park's Sequoia or your Sequoia?

Mr. LEISZ. We would rather you look at our Sequoia.

Mr. YATES. Are they better?

Mr. LEISZ. We think so. The National Forest developing the plans will always retain some old-growth in the National Forest.

Mr. YATES. Yes, but how much are you going to retain? You know, have you seen the old east front over at the Capitol? You know they have the newest front and then you come right in there and there is a picture of the old east front window as it used to be.

Now, is that the kind of retention you want? How many trees are you going to keep? Suppose you have 10 million acres of old-growth forest, are you going to cut down 9 million acres and keep one million acres or are you going to cut down 9.5 million acres? acres?

What are your plans?

These are the things I want to know. Also, what would the effect of carrying out your plans be in view of what the congressional perspective and mandates are in the legislation as it is passed?

[COMMITTEE NOTE.—Subsequent to the hearing, the committee was informed that Douglas Fir is the only timber classified as "old-growth timber" on National Forest System land.]

[The information follows:]

DOUGLAS FIR OLD GROWTH

There are about 6.7 million acres of commercial forest land (CFL) on the National Forests in the area known as the Douglas Fir Subregion of Oregon and Washington. This consists of the Forests on the westside of the Cascade Mountains in Oregon and Washington which are the Gifford Pinchot, Mt. Baker-Snoqualmie, Olympic, Mt. Hood, Rogue River, Siskiyou, Siuslaw, Umpgua, and Willamette. This is the area where a predominate part of the old-growth Douglas Fir type is located and is usually the area referred to in most discussions about old-growth. About 4.5 million acres of this total commercial forest land is considered old growth. In fiscal year 1983, these forests will sell or harvest the old-growth timber on 86,600 acres and the volume will be 3.03 billion board feet.

When this timber is harvested, the effects are highly variable and will depend on local site conditions and other factors. Some soil erosion will result from road building. However, this will be held to a minimum through good engineering practices and administration of contracts. Water resources including anadromous fish will be protected by the proper use of bridges and culverts protection of riparian zones along live streams and rivers. Visual variety will be considered through the use of landscape architects who will help design timber sales to blend harvest openings into the existing old-growth forest. Wildlife impacts will vary. Conversion of old-growth to young stands will benefit certain types of wildlife such as black-tailed deer by increasing browse and hiding cover. Species associated with old-growth timber such as the Northern Spotted-owl would be adversely affected if there was a major reduction in the amount of old-growth. However, the National Forest old-growth is being reduced by about 3 percent a year through timber harvesting; a rate that would not threaten Northern Spotted-owl population viability throughout the subregion prior to completion of [illegible] Forest plans. The National Forest old-growth on commercial forest land being managed for multiple use with emphasis on timber production will last about 50 years under present harvest schedules. On other lands, where other resources are emphasized, old-growth will last more than 70 years. In addition, there is a large acreage of old growth forest where timber harvesting is not planned, such as wilderness, research natural areas, unstable soils and other very sensitive areas. A major issue to be resolved in forest plans is to determine the appropriate amount of old growth to be managed in the future for the benefit of certain wildlife species such as Northern Spotted-owl.

The volume of old-growth to be harvested by old-growth forests—volume to be harvested in 1983-85

Forest:	*Billions of board feet*
Gifford Pinchot	0.425
Mt. Baker-Snogualmie	.242
Olympic	.122
Rogue River	.212
Siskiyou	.395
Siuslaw	.273
Umpqua	.546
Willamette	.576
Mount Hood	.243
Total (annually)	3.034

Mr. YATES. And with that I think we will adjourn for the day. We will see you tomorrow morning.

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WEDNESDAY, APRIL 28, 1982.

UNITED STATES DEPARTMENT OF AGRICULTURE, FOREST SERVICE (continuation)

WITNESSES

JOHN B. CROWELL, ASSISTANT SECRETARY, U.S. DEPARTMENT OF AGRICULTURE

R. MAX PETERSON, CHIEF, FOREST SERVICE

J. LAMAR BEASLEY, DEPUTY CHIEF, PROGRAMS AND LEGISLATION, FOREST SERVICE

F. BRYAN CLARK, ASSOCIATE DEPUTY CHIEF, RESEARCH, FOREST SERVICE

JOHN H. OHMAN, DEPUTY CHIEF, STATE AND PRIVATE FORESTRY, FOREST SERVICE

RAYMOND M. HOUSLEY, DEPUTY CHIEF, NATIONAL FOREST SYSTEM, FOREST SERVICE

JEROME A. MILES, DEPUTY CHIEF, ADMINISTRATION, FOREST SERVICE

WILLIAM L. RICE, DIRECTOR, PROGRAM DEVELOPMENT AND BUDGET, FOREST SERVICE

LEON H. ANDERSON, DIRECTOR, HUMAN RESOURCES PROGRAMS, FOREST SERVICE

DENNIS KAPLAN, CHIEF, BUDGET CONTROL AND ANALYSIS DIVISION, U.S. DEPARTMENT OF AGRICULTURE

SECOND DAY OPENING REMARKS

Mr. YATES. Let's show the hearing has come to order. This is a continuation of yesterday's hearing on the appropriation for the Forest Service.

We were deep in old growth forests yesterday when we recessed. I was somewhat resistant to your proposal to start cutting the old growth forest and you were resistant to my resistance.

HOUSE INVESTIGATIVE STUDY

I had the opportunity, after the hearing yesterday, to read your reply to the investigative committee. The study, your reply and Congressional Research Service analysis may go into the record at this point.

[The information follows:]

NOT FOR RELEASE UNTIL AUTHORIZED BY THE COMMITTEE

A REPORT TO
THE COMMITTEE ON APPROPRIATIONS
U.S. HOUSE OF REPRESENTATIVES

on

TIMBER SALES PROCESS OF U.S. FOREST SERVICE

Surveys and Investigations Staff
April 1982

NOT FOR RELEASE UNTIL AUTHORIZED BY THE COMMITTEE

April 5 , 1982

MEMORANDUM FOR THE CHAIRMAN

Re: Timber Sales Process of
U.S. Forest Service

By directive dated August 5, 1981, the Committee requested a review of the timber sales process of the U.S. Forest Service.

The study has been completed, and the results are set forth in this report.

Respectfully submitted,

CRAnderson
C. R. Anderson
Chief of the Surveys and
Investigations Staff
House Appropriations Committee

Sebastino J. Castro
Sebastino J. Castro, Director
Surveys and Investigations Staff
House Appropriations Committee

SUMMARY

The review of the Forest Service (FS) timber sales program process has been completed. The review was confined to the Pacific Northwest Region (Region 6) because that region accounts for about 50 percent of the total FS timber sales.

The review disclosed that FS regions do not appraise timber, or conduct timber sales, in the same manner nor do the regions utilize the same procedures. Based on an analysis of 45 sales contracts in Region 6, the FS overestimates the volume of timber to be sold by about 15.8 percent. This is well above the ±5 percent tolerance set by the FS. The amount that the contractor has contracted to pay is about 13 percent more than the amount the FS actually receives. There is little or no correlation between the appraised value of the timber, the bid price offered by the contractor, and what he actually pays. One explanation offered for this difference is that some merchantable timber is treated by the contractor as unmerchantable--slash material--and that the third party scalers--an independent group retained by the purchaser to measure the volume of merchantable timber for which the purchaser pays--always favor the purchaser. Notwithstanding the explanations, substantial losses of revenue to the FS could result.

Skewed bidding--overbidding the least valuable species of timber while underbidding the most valuable species--has resulted in questionable contract awards. For example, in one sale involving a sale of hemlock (low value), and fir (high value), skewed bidding caused the FS to award the contract to a bidder who bid $136,000 for the fir, as opposed to a higher bid of $760,000. This happened because the successful bidder had bid $1,105,000 for hemlock which the FS had appraised at a value of $17,000. The overbid of $1,088,000 on the hemlock is almost meaningless, since the purchaser will probably wind up paying little, or nothing, for the hemlock, because by the time it is cut, its value will have deteriorated almost completely. However, the Government stands to lose more than $600,000 (the difference on the fir bids) on this one sale alone. The unfavorable bid could have been avoided had the FS adequately evaluated the reasons for the price differentials of the various species and heeded available information to offer the hemlock at a fixed rate.

Failure to consider comparable sales values, when appraising timber, have resulted in sales of timber from a cooperative yield unit for $38 million less than true fair market value over the past 3 years.

The analysis of contracts also disclosed that statistical data as to the volume of merchantable timber sold; and the value and volume of timber sold, but uncut, are overstated by about 15.8 percent. This overstatement is resulting in the FS carrying a phantom inventory of sold but uncut timber of about 2.6 billion board feet valued at about $650 million in Region 6.

FS plans to implement 11 proposals which if aggressively implemented, should lessen some of the problems identified in this report.

Analysis of Forty-Five Randomly Selected Completed Contracts

Because the FS management information system does not provide for a comparison of the value and volume of timber sold with the value and volume of timber eventually cut and actually paid for, FS officials at Willamette and Mount Hood National Forests were requested to randomly select approximately 25 recently completed timber sales contracts. These two National Forests annually sell about 10 percent of all FS timber.

FS officials actually provided 45 contracts. The 45 contracts were valued at about $93 million with an estimated volume of about 300 million board feet (MMBF). This amounted to about 25 percent of the volume sold at the two forests. Thirty nine of the contracts were overestimated and six underestimated as to the volume of timber in the sales. This mix is contradictory to FS beliefs that over/under estimates even out. The analysis disclosed:

FS appraised timber value --------------------	$46,939,353
Bid Value of FS timber per sales contract -----	94,068,916
Payment received by FS for timber actually cut by contractors --------------------------	82,139,031

The FS estimated the volume of Douglas Fir to be 292 MMBF but the purchaser cut and paid for only 246 MMBF, or a net shortfall of 46 MMBF or 15.8 percent. The gross cruising (appraisal estimate) difference (plus and minus) is 16.8 percent. The largest difference was 59 percent, and the largest dollar difference on a single contract was $1,040,263.

There is little correlation between the appraised value of the timber, the amount bid by the purchaser, and what the purchaser pays for the timber actually cut. The 15.8 percent net difference between the cruise estimate, and the amount actually paid for, is well above the acceptable ± 5 percent range set by the FS.

FS officials expressed concern but few offered any rationale for the disparity between the estimated/appraised quantity of timber available and the quantity actually cut by the contractors. However, one official offered that some of the difference could be attributed to slash, or waste. Since the purchaser only pays for what he takes, he could only take the premium logs. For example, if a tree contains four logs the top log may not be as valuable as the bottom three so the purchaser could possibly split the fourth log which then goes into the slash, or waste pile. The purchaser then only pays for three logs. Or, if the tree is marginal the tree could be felled so it breaks up and the entire tree becomes slash, or waste. The net effect is that valuable timber could find its way into the waste pile with a resulting decrease in revenue to the Government. To illustrate, the purchaser could bid $275 per thousand board feet (MBF) but end up paying anywhere from $0.50 per MBF to $25 per MBF for the now classified unmerchantable timber.

Another explanation of the difference was offered by a FS check scaler. The third party scalers, paid by the purchaser, measure the log by length and width to arrive at volume. (The acceptable variance is 2 percent of volume.) The FS official advised he very seldom sees a variance in favor of the Government; it's almost always in favor of the contractor. A 1.5 percent error rate in favor of the purchaser, results in a potential loss of revenue of about $17 million per year in Region 6 alone.

Overstated Sold but Uncut Inventory

Another impact of the purchaser cutting 15.8 percent less than what was contracted for is that the sold figure--the base figure for the cut and sold report and uncut under contract report--is likewise inflated by the appraisal overstatements.

As of the end of FY 1981, the FS shows a total sold but uncut inventory of 32,671 MMBF. Region 6 shows a sold but uncut inventory of 16,295 MMBF. An analysis of 45 completed sales contracts in Region 6 shows that the FS has overestimated the volume by 15.8 percent. Applying the 15.8 percent error to the 16,295 MMBF inventory figure in Region 6, an error of 2,574 MMBF is calculated. The 2,574 MMBF is carried on FS records at a value of about $650 million. Assuming the correctness of the error rate, it means that the FS is carrying a phantom inventory of sold but uncut timber of $650 million in Region 6.

FS Appraisals do not Reflect Fair Market Value

The FS is required to sell their timber at not less than the appraised value. The objective of the appraisal is to estimate fair market value. Fair market value is defined as the amount in cash or on terms reasonably equivalent to cash for which a willing buyer and seller have agreed.

In actual practice, bidders are awarded contracts based on bids received in one year, but the timber may not be cut and paid for until several years in the future. The time when the timber is actually cut and paid for is, to a major extent, at the discretion of the successful bidders. This can open the door for a considerable amount of speculation on the part of the bidders. Further, a very minimum investment is needed to obtain, and hold the contract until the timber is actually cut and payment is required to be made. Deferring the actual cutting, and payment for several years, with the tacit approval of the FS, encourages overbidding in periods of inflation. Overbidding also provides incentives to the purchaser to exercise whatever options are available to ensure the greatest profit, including possible manipulation of species and quantities of timber to be cut. However, this practice may not work to the best interest of the Government for several reasons; (1) revenues from timber sales is deferred in the future, sometimes indefinitely, (2) program of harvesting older timber is delayed, and (3) programs for reforestation and opening of forest areas programs may be disrupted.

Shelton Sustained Yield Unit

As noted above, purchasers generally bid more than the FS appraisals. However, sales from the Shelton Cooperative Sustained Yield Unit are the exception. The Shelton Unit was established in 1946 and requires the cooperator to commit his land to a joint management plan. In exchange he obtained first refusal right on any public timber sale advertised for sale in the unit, at the appraised price. Appraisals are to be made in the same manner as regular FS sales in Region 6.

For comparison purposes, several nearby FS sales, but outside the unit, were identified and the overbid percentage was applied to the Shelton unit's sales over the past 3 years. Had FS used a comparable sales appraisal approach or even if overbids had been given some consideration in the appraisal process, the Government would have received an additional $38 million from the unit's sales.

Mount St. Helens Salvage Sale

The May 18, 1980, and subsequent eruptions have destroyed the northern portion of Mount St. Helens. The final environmental impact statement stated that of the 1.6 billion board feet (BBF) of timber included in the blast area, 540 million board feet (MMBF) was destroyed and about 1,063 MMBF of merchantable size material remained in the area. With each passing month a decline in the value of the hemlock and true fir is occurring. By the end of the third and fourth year the value of the hemlock will have been reduced by 33 and 65 percent, respectively.

Skewed Bidding

Because the forest supervisor did not follow the recommendation of the FS regional office that the whitewood groups--hemlock--be fixed rated (fixed priced) regardless of amount, the Federal Government will receive substantially less revenue from the Mount St. Helen's salvage sales. Failure to fix rate the less valuable species of timber has allowed the less than high bidder for the valuable Douglas fir species to become the high bidder. For example, on sale #6:

Species	Volume MBF	Appraisal	Successful Bidder	Third High Bidder
			--- MBF ---	
Douglas fir	7,600	$11.64	$ 18.00	$100.00
Cedar	700	2.00	2.00	2.00
Hemlock	8,500	2.00	130.00	2.00
PAM/Waste	3,200	5.58	5.58	5.58
Total Bid 1/		$124,720	$1,261,056	$796,256

1/ Represents the volume (quantity) of species times the unit price.

The FS awards the timber sales on total bids. In the above example the successful purchaser's total bid was $1,261,056. To increase his total bid, the high bidder overbid the less valuable and rapidly deteriorating hemlock species. In this instance, the high bidder is speculating that by the end of the contract, the volume of least valuable species will be substantially reduced primarily through deterioration, and he will not have to pay the bid price of $130 per MBF. In essence, the purchaser is anticipating that the hemlock will become part of the fixed rated PAM/waste, ($5.58 per MBF).

In reality, the more than $1 million overbid on the hemlock is almost meaningless, since the purchaser will wind up paying little, or nothing, for the hemlock. However, the Government stands to lose more than $600,000 (the difference in the fir bids) on this one sale alone.

If the forest supervisor had fix rated the hemlock and only offered the Douglas fir, the high bidder would have been bidder #3 who bid $100 per MBF. The Government then would have received $760,000 (7,600 MBF multiplied by $100 per MBF) for the Douglas fir rather than the $136,000 bid for this species by the successful bidder.

Negative Value Timber Included in Sales

Another problem with the salvage sale was the practice of reducing the appraised positive valued species--Douglas fir because the hemlock had a negative value, in some instances.

Negative values occur when it is anticipated that the costs to cut, haul, process, etc., (total manufacturing costs) exceed the selling value of the timber species. This situation occurred in six of the seven Mount St. Helen's sales analyzed. In such situations, the species with positive values must be reduced and offset against the species with negative values so that both wind up with positive values. This follows FS policy and practice.

To illustrate, in sale #57 the FS appraisal reflected that since the hemlock had a negative value of $39.53 MBF and FS policy requires that all offered species must be at the base rate, the positive valued Douglas fir was reduced from $77.20 MBF to $3 and the negative valued hemlock increased from a minus $39.53 to a positive $2.04. The effect was that both species were offered at positive values.

Because of the adjustments, the appraised value of the sale was $38,000 yet the high bidder bid $1,714,600, an overbid of 4,512 percent. The Douglas fir was appraised at $3 MBF and the high bidder bid $164 MBF; the hemlock was appraised at $2.04 and the high bidder bid $95.

Additional Potential Problem Areas

As in any "for profit" enterprise, purchasers of FS timber generally strive to buy at the lowest price, and sell at the highest price. It is possible that, in attempting to optimize profits, some less than desirable practices could be utilized. Some such problems are cited above. The following are some additional potential problem areas.

Collusive Bidding

The problem of collusive bidding is of concern to many in and out of the FS, especially in areas where there is little competition. The USDA General Counsel considers collusion to be a problem, but advises it is difficult to ascertain the degree to which it occurs because of the overwhelming evidence required to substantiate proof of its existence. However, the General Counsel believes implementation of the sealed bidding process would preclude most of this problem.

Speculative Bidding

Speculative bidding on FS timber is occuring with ever increasing overbid rates. Recently in Region 6 Westside overbids reached a high of 778 percent in August 1980. In August 1981, the overbid percentage declined to 490 percent.

Third Party Scaling

The cost of scaling (measure of realism of timber cut) is paid by the purchaser and passed on to the Government. A recent Office of Inspector General (OIG) USDA report advised, there were serious weaknesses in FS policies and controls which provide for considerable opportunity for fraud to occur although specific cases of fraud had not been uncovered to date.

FS Plans for Improving Timber Sales Process

In view of recognized deficiencies in its timber sales process, the FS plans to implement a revised system after March 31, 1982, to include the following:

(1) The basis for calculating the amount of the bid guarantee required of prospective bidders on a Forest Service timber sale contract shall be 5 percent of the advertised value of the contract.

(2) The high bidder will be required, as a condition of being awarded the sale, to replace the bid guarantee with cash in the amount of 5 percent of the bid price within 10 business days after bid date.

(3) The maximum performance bond to be required on an FS timber sale contract will be $500,000.

(4) To qualify as a bidder of National Forest timber sales, proof of ability to furnish a performance bond or other performance guarantee will be required for sales of more than $10,000 of advertised value.

(5) Purchasers who have defaulted on a National Forest timber sale must reestablish financial and performance qualifications prior to bidding on National Forest timber sales.

(6) By the end of the normal operating season following the midpoint of any sale term of more than 3 years duration, the purchaser shall have paid the greater of either (1) 50 percent of the bid premium, calculated as of the date the sale was awarded, or (2) 25 percent of the anticipated contract price, calculated as of the date the sale was awarded.

(7) Timber sales for a term of more than 2 years will require monthly deposits during the final operating season.

(8) For timber presented for scaling prior to the last year of the sale term, payment rates will be reduced by a factor based on the average rate being paid for borrowings by the United States.

(9) Stumpage rate adjustment shall be provided for in all National Forest timber sale contracts in western Oregon and Washington awarded after March 31, 1983.

(10) New charges will be levied when the contract is extended.

(11) Additional penalties will be levied for defaulted contracts.

I. INTRODUCTION AND BACKGROUND

A. Introduction and Scope

By directive dated August 5, 1981, the Committee requested that a study be made of the timber sales process of the Forest Service (FS), Department of Agriculture.

FS officials were interviewed in Washington Headquarters, and the Atlanta and Portland Regional Offices, and visits were made to the Mississippi National Forest Office and the Holly Springs National Forest, Holly Springs, Mississippi; the Mt. Hood National Forest Office, Gresham, Oregon; Willamette National Forest Office, Eugene, Oregon; and the Gifford Pinchot National Forest Office, Vancouver, Washington. Visits were made to several Ranger Districts in each of the National Forests.

B. Background

The FS is responsible for the management, protection, and use of the 188 million-acre National Forest System which provides a sustained flow of renewable resources including wood, forage, wildlife habitat, and water.

The system encompasses nine regions containing 154 National Forests, 19 National Grasslands, and 17 Land Utilization Projects located in 44 states, Puerto Rico, and the Virgin Islands.

The 1975 Renewable Resource Program prepared under the Resource Planning Act (RPA) as amended provides overall direction for the management of the National Forest resources, among which is timber.

Timber

The United States contains over 500 million acres of commercial forest land--i.e., land available for and capable of producing crops of industrial wood--in Federal, State, or private ownership. Approximately 59 percent of the Nation's commercial forest land is in farm and miscellaneous small private ownerships; 14 percent is owned by industrial timber companies and 9 percent is in private ownership and managed by Federal agencies other than the FS. Of the 188 million acres in the National Forest System, 90.2 million acres are classified as commercial forests.

Largely because of the substantial areas of large, overmature trees in the Pacific Northwest, the National Forests contain 52 percent of the Nation's standing softwood timber. Some 27 percent of the Nation's annual softwood harvest comes from these lands. The National Forests also contain about 8 percent of the Nation's hardwood sawtimber and provide about 3 percent of the annual harvest.

Timber Management

National Forest timber is managed on a sustained yield basis to produce a continuous supply of wood products to meet the economic demands while maintaining the productivity of the land. Timber is harvested in each National Forest according to a timber management plan in which the sustained yield harvest has been calculated by actual visits to the timber sale site. Timber management plans are revised periodically to reflect changes in inventory, use, and environmental objectives, however, changes in the amount of timber available may be incorporated in the plan as they occur.

The timber management plan also takes into account the tree culture and logging system to be used in harvesting and replanting. Using more efficient balloon, helicopter, and skyline cable systems often facilitates reforestation and protects other resource values.

Sales

The following schedule shows that since FY 1964, the FS has followed the sustained yield philosophy as far as timber sold is concerned, however, the harvest or cut of timber has fluctuated. The FS awards the contract, but does not dictate when the timber will be cut or harvested. The harvesting of timber is one of the problem areas in the FS timber sales program.

ALLOWABLE TIMBER HARVEST, VOLUME AND VALUE OF TIMBER CUT AND SOLD ON THE NATIONAL FORESTS BY FISCAL YEAR 1964 TO PRESENT

FY	ANNUAL ALLOWABLE HARVEST MMBF 1/	TIMBER SOLD			TIMBER CUT		
		VOLUME MMBF 1/	VALUE M$ 2/	AVERAGE PER M	VOLUME MMBF 1/	VALUE M$ 2/	AVERAGE PER M
64	12,751.0	11,681.5	171,925.1	14.72	10,956.2	151,075.0	13.79
65	12,724.8	11,510.6	198,185.1	17.22	11,244.0	161,105.8	14.33
66	12,992.9	11,383.0	226,014.5	19.86	12,138.4	195,590.2	16.11
67	13,059.6	11,654.6	208,603.6	17.90	10,850.9	188,711.0	17.39
68	12,979.7	11,651.6	274,254.0	23.54	12,128.2	239,311.6	19.73
69	13,552.3	10,930.9 3/ 10,180.9 4/	502,140.8 3/ 476,677.7 4/	46.52 46.83	11,783.5	326,967.6	27.75
70	13,537.9	13,382.0	317,302.6	23.71	11,526.7	307,609.8	26.69
71	13,673.5	10,636.4	215,299.6	20.24	10,341.2	257,020.2	24.85
72	13,631.4	10,339.5	328,436.3	31.77	11,700.4	381,956.6	32.64
73	13,565.5	10,199.2	636,151.7	62.37	12,357.0	479,233.0	38.78
74	13,266.0	10,241.1	902,608.5	88.14	10,958.4	508,615.4	46.41
75	16,340.2	10,823.5	657,212.8	60.72	9,173.8	365,951.7	39.89
76	16,279.0	10,287.3	707,832.7	68.81	9,575.5	492,029.2	51.38
T Qtr	-	1,535.3	94,005.9	61.23	3,432.0	202,937.6	61.17
77	16,169.6	9,919.7	987,416.5	99.54	10,451,5	732,547.8	69.89
78	16,142.8	10,995.9	1,328,415.7	120.81	10,079.5	854,682.2	84.79
79	16,003.8	11,330.4	1,962,624.4	173.22	10,377.0	968,033.4	93.29
80	15,051.3	11,398.9	1,968,665.9	172.71	9,147.9	730,229.2	79.82

1/ Sawtimber and Small Convertible Products

2/ Value Includes K-V

3/ Includes Large Alaska Sale

4/ Excludes Large Alaska Sale

The following schedule shows the timber sold and cut by number of sales per state during FY 1980.

Timber sold and harvested on National Forest System lands--fiscal year 1980

State or Commonwealth	Timber sold			Timber harvested	
	Sales number	Volume Thousand board feet	Value dollars	Volume Thousand board feet	Value dollars
Alabama	529	75,314	3,591,113	76,744	4,685,736
Alaska	120	189,267	19,969,091	451,140	7,186,121
Arizona	11,539	196,100	14,219,611	263,137	11,510,268
Arkansas	886	195,918	15,106,057	235,803	13,717,227
California	18,038	2,049,533	468,678,258	1,461,090	120,809,743
Colorado	1,706	131,317	907,114	111,135	1,092,202
Florida	128	104,360	5,448,279	110,791	4,417,695
Georgia	932	89,508	2,439,870	96,571	2,381,808
Idaho	9,681	829,245	34,163,249	637,967	24,772,147
Illinois	42	14,697	361,858	7,104	127,147
Indiana	51	7,228	285,562	5,626	265,157
Kentucky	107	19,006	439,535	19,710	339,764
Louisiana	330	149,940	18,349,388	144,328	10,644,959
Maine	13	6,905	70,609	2,067	39,236
Michigan	1,006	161,597	2,996,833	169,427	2,416,829
Minnesota	278	138,485	2,818,389	113,262	964,927
Mississippi	707	246,541	20,420,623	307,245	19,850,412
Missouri	731	52,597	1,879,530	53,095	2,026,115
Montana	2,986	558,648	23,987,410	420,487	15,413,515
Nebraska	3	13	1,160	13	1,160
Nevada	337	691	3,678	515	3,661
New Hampshire	225	28,679	412,507	23,942	490,009
New Mexico	16,368	134,508	2,251,772	102,257	4,728,953
New York	67	224	17,131	77	549
North Carolina	3,734	66,266	1,440,409	51,946	1,041,864
Ohio	82	8,825	231,520	11,264	287,011
Oklahoma	110	38,429	2,496,248	25,889	1,346,548
Oregon	8,537	3,714,569	1,037,315,500	2,511,401	348,131,671
Pennsylvania	145	41,671	4,549,311	45,021	2,687,842
South Carolina	293	118,848	9,289,584	98,531	5,975,833
South Dakota	122	98,310	792,196	82,119	1,171,374
Tennessee	154	32,439	552,826	28,585	597,873
Texas	427	101,329	16,615,405	63,507	5,723,398
Utah	2,244	55,509	473,455	44,663	1,606,029
Vermont	131	16,611	515,860	10,929	330,321
Virginia	645	51,341	474,802	37,921	396,600
Washington	3,435	1,433,983	252,121,068	1,121,058	109,093,837
West Virginia	373	19,234	330,328	14,023	527,970
Wisconsin	408	113,177	2,070,321	109,643	1,519,280
Wyoming	1,667	107,994	578,417	77,819	1,906,422
Puerto Rico	0	0	0	0	0
Total	89,337	11,398,856	1,968,665,871	9,147,051	730,229,213

II. BUDGET PROCESS AS IT RELATES TO THE TIMBER SALES PROGRAM

The budget process, timber sales process, and the goals of Renewable Resources Program-1980 update are intermeshed. The Forest and Rangeland Renewable Resource Act of 1974 calls for a program every 5 years and an assessment every 10 years, covering at least 4 decades. The 1980 update establishes, among other items, timber programmed sales with a high and low range through the years 2021-30. With a base year of 12.2 billion board feet (BBF) in 1978 and an 11.9 BBF in FY 1981, the RPA established the following target goals for timber sales:

Fiscal Year	BBF High	BBF Low
1982	11.9	11.0
1983	12.1	11.0
1984	12.2	11.0
1985	12.5	11.0
1986-90	12.9	11.0
1991-2000	13.7	12.5
2001-10	14.9	12.7
2011-20	15.8	13.0
2021-30	16.4	13.2

With these goals in mind and the following schedule on Annual Allowable Harvest/Potential Yield as a benchmark, the following output targets were established by the FS for each region.

ANNUAL ALLOWABLE HARVEST/POTENTIAL YIELD
BY REGION AND FISCAL YEAR
Million Board Feet (Local Scale)

Fiscal Year	1	2	3	4	5	6	7	8	9	10	Total*
1940	1/Reduction in 1974 reflects RARE I adjustment										6579
45	2/Increase in 1975 reflects recasting of AAH into Potential Yield										6500
50	3/Reduction in 1980 reflects RARE II adjustment										6000
55	807	465	333	410	1346	2921	206	642	492	930	8553
60	1752	399	372	526	1399	3815	354	741	540	1030	10965
65	1545	1054	602	572	1977	4281	-	844	986	864	12725
70	1810	1000	582	740	1949	4415	COMBINED WITH REGIONS 8 and 9	1154	988	891	13538
71	1856	982	582	743	1949	4411		1156	1108	888	13674
72	1856	982	594	728	1976	4392		1108	1108	888	13631
73	1856	936	620	726	1976	4356		1101	1108	888	13566
74	1799	896	616	704	1921	4244		1101	1108	888	13266 1/
75	2210	1269	638	922	2164	4930		1849	1101	1344	16416 2/
76	2210	1109	618	918	2363	4767		1849	1101	1344	16279
77	2210	1109	620	922	2249	4767		1849	1101	1344	16170
78	2223	1127	620	922	2249	4728		1849	1101	1344	16163
79	2180	1089	619	922	2268	4612		1731	1240	1344	16004
80	1567	1033	606	906	2272	5279		1731	1094	566	15051 3/
81	1567	1033	613	906	2272	5367		1731	1100	566	15163

*Data may not add to Totals due to rounding

1/Reflects adjustment for RARE I

2/Reflects recasting Annual Allowable Harvest to Potential Yield

3/Reflects adjustment for RARE II

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A. Budget Flow

The FS budgetary process begins about 2 years before the funded fiscal year, for example, information is first requested in 1981 for the FY 1984 budget year. To illustrate the process, due dates for the program budget submissions would more or less adhere to the following schedule:

August 30, 1981*	Guide instructions submitted to field.
December 1981- January 1982	Negotiations between regional foresters and deputies to resolve target attainment problems.
March 1, 1982	Chief and Staff (C&S) meet to develop tentative national budget level objectives prior to discussion with the department.
March 1, 1982*	Data and State and Private Forests (S&PF) narratives due in Washington Office (WO).
March 15, 1982	All National Forest System (NFS) narratives due in WO. Research program submittals due. Program Development and Budget (PD&B) gives edited and semivalidated data to deputy areas for validation.
March 24, 1982	Finalize national level budget objectives.
March 29, 1982	Deputy areas complete validation, PD&B finalize.
April 5, 1982	Revise and finalize data reports given to deputy areas.
May 5, 1982	First draft of budget levels presented to chief and staff.
May 26, 1982	Final budget levels presented to chief and staff.
June 11, 1982	Budget levels revised and completed per May 26 chief and staff direction. Commence reformat and analysis.
July 9, 1982*	Transmit to Department of Agriculture.

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* Most significant dates.

With these important target dates, the FS provided the following instructions and direction for the FY 1984 timber sale program.

B. Timber Sales Level

The FS budgetary guideline package stated that emphasis must be given to intensify FS timber management efforts within presently roaded areas and must also consider the need to increase the amount of volume from nonroaded areas in planning their levels 0 through 7. To the extent practical, access should be developed into roadless areas. This instruction reemphasized concentration on new road construction versus reconstruction and stated it was necessary to increase timber offerings.

Regions 1, 5, and 6 were to continue to plan and finance in Levels 1 through 7 the sale area planning and presale preparation work on those forests that have the opportunity for an approved departure alternative to their Land Management Plan. Regions were to submit estimates of the timber volume being worked.

The FS instructions expressed concern about the costs and economic efficiency of the entire Timber Sales Program, including support and road costs. The instructions noted the following analyses will be needed in 1984 to better identify and justify funding needs.

(1) Roaded and nonroaded timber volumes that will be prepared and offered for sale must be separately identified. There is a need to have all of the direct timber costs, other resource support costs, and road costs separated into these two decision variables as well. Regions will need to develop specific controls in order to accomplish this effort. The narrative report should explain fully how the mix of sales and costs were developed for roaded and nonroaded areas.

(2) Costs to prepare and sell current year volumes and current costs to prepare outyear volumes must be identified. The FS will need a further breakdown of the above information, so that an analysis can be made for FY 1984 of the current year costs versus outyear costs.

The summary of timber sale and related support costs will be separated and listed for the following categories by region:

(1) All volume that has been prepared and finalized from previous year's work and offered for sale in FY 1984 and all volumes for which sale preparation is begun, completed, and offered for sale, in FY 1984.

(2) All volume that is to be prepared and offered for sale in FY 1985.

(3) All volume that is to be worked on for preparation and sale beyond FY 1985.

(4) All volume that has been sold in previous years and will be administered for harvesting activities in FY 1984. This will include all of the direct timber sale costs and related support costs.

For each timber decision variable, the regions will calculate a present net worth in terms of receipts to the Government discounted to the current budget year.

For each decision variable, by level, the regions will provide the present value of all costs and present value of all revenues. They will also provide the present values of cost and revenue differences between levels. Provide a brief narrative explaining the increase or decrease in present net worth for differences between levels.

The budgetary package also requires the regions to account for National Forest Funds (NFF) receipts, Knutsen-Vandenberg (K-V) collection, and purchaser credit receipts separately. Receipts should be based on forest weighted-average stumpage for the most recent complete fiscal year. Present value of revenues, one for each of the above categories, needs to be provided.

Road construction analysis, where roads support the timber decision variable, should include timber revenues throughout the expected life of maintenance, must also be considered and identified. Four present values need to be provided: Budget year revenues, budget year costs, future year revenues (discounted), and future year costs (discounted).

Only those road construction costs necessary to support the timber decision variable should be included. General purpose roads or that portion of road construction costs in excess of required timber support should not be included in this analysis.

Once the regional office receives its directions, goals, and targets for its timber sale program, the office makes the distribution of million board feet (MMBF) target and funding allocations to the forest level.

At these early stages the Office of Management and Budget (OMB) advised the United States Department of Agriculture (USDA) of tentative monetary ranges for the FS and among these ranges is a range for timber management--i.e., timber sales. OMB presents a worst and best case funding scenario with indirect mention of the RPA target harvest goals. USDA then establishes its budget scenario on worst/best case and establishes tentative monetary and volume targets for the FS. The FS with these tentative targets establishes its targets for each region, as follows:

Table NFS-2
Regional 1984 Targets by Level

Items	Levels	R-1	R-2	R-3	R-4	R-5	R-6	R-8	R-9	R-10	Total
Developed sites (FSL)	0	1.3	4.5	3.2	6.1	16.1	7.1	10.6	7.6	.5	57.0
MM PAOT Days	1	.7	2.8	2.1	2.5	7.7	6.2	9.5	7.0	.4	38.9
	4	-	-	-	-	-	-	-	-	-	-
(Aggregate 8404FSL)	7	3.5	7.7	8.8	9.6	22.4	14.5	21.9	13.50	.9	102.0
Developed Sites (RSL)	0	2.6	4.8	5.2	4.4	7.7	4.2	13.4	7.5	.6	50.4
MM PAOT Days	1	4.4	5.8	7.5	8.7	14.0	7.4	11.0	5.7	.5	65.0
	4	-	-	-	-	-	-	-	-	-	-
(Aggregate 8404RSL)	7	1.2	2.7	3.0	3.4	8.0	5.2	7.0	4.8	.3	36.2
Fuel Treatment PA/FFP	0	0	0	0	0	0	0	0	0	0	0
M Acres	1	8.8	5.4	20.8	11.9	6.9	13.4	47.0	2.8	0	117.0
	4	-	-	-	-	-	-	-	-	-	-
(Aggregate 8434FFM)	7	90.0	20.9	57.3	25.0	26.0	24.5	81.9	3.7	0	298.3
Wildlife & Fish Habitat Imp.	0	31.2	39.0	14.4	14.2	31.8	10.0	122.6	12.0	.3	276.4
M Acres	1	9.9	45.9	7.8	9.7	16.8	41.4	83.0	25.5	4.8	244.5
	4	-	-	-	-	-	-	-	-	-	-
(Aggregate 8407WHI)	7	47.6	99.2	25.0	70.2	57.2	29.4	278.4	17.0	1.2	626
Permitted Grazing	0	1.42	2.21	2.41	2.28	.46	.62	.26	.07	-	9.73
MM AUMs	1	1.42	2.21	2.41	2.28	.46	.62	.26	.07	-	9.73
	4	-	-	-	-	-	-	-	-	-	-
(8411AUM)	7	1.429	2.26	2.37	2.41	.52	.75	.3	.08	-	10.12
Timber Sale Preparation	0	1.1	.32	.40	.35	1.75	4.9	1.1	.62	.46	11.0
MMBF	1	1.212	.399	.460	.419	1.580	4.340	1.290	.72	.51	12.330
	2	1.342	.399	.540	.419	2.20	5.60	1.40	.72	.51	13.13
	4	1.212	.399	.460	.419	1.580	5.340	1.290	.72	.51	12.330
(Aggregate 8414MBF)	7	1.210	.390	.460	.419	1.60	5.300	1.290	.72	.51	12.239
Reforestation	0	32/25	6/2	7/2	8/5	26/21	35/80	35/40	22/14	1/1	172/190 = 362
M Acres	1	34/25	8/3	8/3	8/6	28/23	37/86	42/47	24/14	1/1	190/208 = 398
PM/K-V	4	35/27	9/3	8/3	9/6	28/24	38/88	45/49	25/14	1/1	197/215 = 412
(Aggregate 8415REF)	7	36/27	9/3	9/3	9/6	29/27	39/94	48/53	25/14	1/1	205/228 = 433
Timber Stand Improvement	0	5/8	6/8	16/25	9/7	20/24	90/30	36/10	25/8	8/0	215/120 = 335
M Acres	1	7/8	16/9	16/30	9/7	22/24	90/30	44/10	28/8	9/0	240/126 = 366
PM/K-V	4	8/8	18/9	18/32	9/7	22/24	90/30	46/10	30/8	9/0	250/128 = 378
(Aggregate 8416TSI)	7	9/8	18/9	22/35	18/8	22/24	90/30	46/10	31/8	9/0	257/132 = 389
Soil and Water Improvement	0	-	-	-	-	-	-	-	-	-	-
M Acres	1	-	-	-	-	-	-	-	-	-	9.1
	4	-	-	-	-	-	-	-	-	-	-
(Aggregate 8425SWI)	7	2.9	1.9	2.3	8.5	4.1	9.8	1.9	1.0	.5	32.9
Mineral Leases and Permits	0	-	-	-	-	-	-	-	-	-	-
M Operating Plans	1	-	-	-	-	-	-	-	-	-	-
	4	-	-	-	-	-	-	-	-	-	-
	7	3.2	2.5	3.2	4.4	2.5	4.6	4.2	2.3	.4	27.3

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Once the regional office receives its funding and allowable cut targets, which generally are consistent with regional office potential and RPA goals, the regional office makes the distribution of thousand board feet (MBF) targets and funding allocations to the forest level.

The forest office distributes these goals and targets to its ranger districts, after appropriate review and analysis. The ranger districts, who have their timber sale plans in place and have scheduled timber sales 5 years in advance, match their own scheduled sales against the forest office given targets of funds and harvest. These sales are then formally scheduled for the appropriate year.

With these given constraints of money and allowable cut, the budget process reverses itself, with what the ranger district can do with monies and allowable cut. The district's plans are reviewed and merged by the forest. The forest plan is submitted to the regional office for review. The regional office merges the forest plans and prepares its program and submits it to Washington headquarters.

The above process is repeated on a tentative basis and again on a final basis.

C. Timber System Cost Study

Since 1973 the FS has been working on a timber cost accounting system which will update cost factors for each activity in the National Forest portion of the timber system for use in the program budgeting system. This revised cost system will be used for the first time to prepare the 1984 budget.

Other objectives of this extensive cost study are to:

-- Identify and describe each of the timber program activities.

-- Record and confirm the standards for each activity in light of today's knowledge, public interest, and protection and enhancement of the environment.

-- Establish the production levels which current FS resource capacities can perform in conformance with the above standards.

-- Identify the total resources in terms of manpower and dollars needed to carry on a maximum timber program while conforming with the above standards.

-- Identify and quantify those program, physical, and administrative elements which significantly affect the cost of doing business.

- -- Provide a method whereby each administrative unit can uniformly and quickly determine its unique timber management workload and the associated costs of the timber system.
- -- Identify indirect and overhead cost relationships within the timber system.
- -- Give credibility and support to the budget and program information prepared and submitted to the Secretary of Agriculture, the Office of Management and Budget, and the Congress.

This cost system is designed to allow the FS to identify all costs involved in the conduct of the FS timber sales program.

D. Incremental Cost in Increased Timber Sales

The FS was tasked to identify the incremental cost to increase its FY 1984 timber sale program from the RPA target of 11.3 BBF to 12.5 BBF (at various sale levels), and that these costs should include ancilliary aspects such as fish and wildlife, recreation, fire, etc. Particular attention was requested for the cost of sales preparations and administrations.

Using the projected FY 1982 timber sales level the FS identified the incremental cost as follows:

FY 1982 TIMBER SALES LEVELS
(millions of dollars)

	11.3 bbf Total	11.5 bbf Prep-Offer (increment)	11.7 bbf Prep-Offer (increment)	11.9 bbf Prep-Offer (increment)	12.0 bbf Total	12.2 bbf Prep-Offer (increment)	12.4 bbf Prep-Offer (incremant)	12.5 bbf Prep-Offer (increment)
Sales Prep	160.1	162.9	165.8	168.6	171.5	175.5	179.9	182.1
Sales Admin	38.0	38.6	39.3	40.0	40.3	41.0	41.7	42.1
Subtotal	(198.1)	(201.5)	(205.1)	(208.6)	(211.8)	(216.5)	(221.6)	(224.2)
Support								
Minerals	1.4	1.5	1.5	1.6	1.7	1.8	1.9	1.9
Landline	21.6	22.0	22.3	22.7	23.7	25.8	27.7	28.7
Fire	3.1	3.2	3.3	3.4	3.4	3.4	3.5	3.5
Rd. Mtce	43.3	44.0	44.8	45.6	46.0	46.7	47.5	47.9
Recreation	10.5	10.7	10.9	11.1	11.2	11.5	11.8	11.9
Wildlife & Fish	5.7	5.9	6.0	6.1	6.1	6.3	6.4	6.5
Range	.5	.6	.6	.7	.8	.8	.9	.9
Soil & Water	6.7	6.8	6.9	7.0	7.1	7.2	7.3	7.4
Total NFS	(92.8)	(94.7)	(96.3)	(98.2)	(100.0)	(103.5)	(107.0)	(108.7)
Construction & Land Acquisitions								
Rd. Const*	243.0	247.2	251.6	255.9	261.8	273.5	285.3	291.2
Purchaser Const.	230.3	234.4	238.4	242.5	247.5	257.6	267.7	272.7
Total C&LA	(473.3)	(481.6)	(490.0)	(498.4)	(509.3)	(531.1)	(553.0)	(563.9)
Brush Disposal	44.0	44.8	45.6	46.4	46.8	47.6	48.4	48.8
Purchaser Election	38.2	38.9	39.5	40.2	41.6	43.2	45.9	46.2
Timber Salvage Sale	2.2	2.3	2.3	2.4	2.4	2.4	2.5	2.5
Tongass Tbr. Supply Fund	39.9	40.6	41.3	42.0	42.4	43.1	43.7	44.1
Subtotal	(124.3)	(126.6)	(128.7)	(131.0)	(132.2)	(136.3)	(140.5)	(141.6)
TOTAL	888.7	904.5	920.2	936.2	954.3	987.4	1,022.1	1,038.4

PFT Staff - years

* Includes 10 percent fund.

E. Economic Impact of Receipts on States and Counties

The National Forest Management Act of 1976 requires that 25 percent of the total timber sales receipts are to be returned to the states for school and road projects. These receipts are paid to the states by the FS. The states in turn distribute the receipts to the counties according to the percent of National Forest land contained in the particular county. The percentile distribution among the road and school funding is determined locally.

In the Willamette National Forest, officials of Lane County, Oregon, were contacted to ascertain the impact of the suppressed condition of the timber industry. Lane County officials advised, until FY 1981, revenue from these timber receipts was basically stable. The FS timber sales receipts are the "backbone" of the capital improvement of the county road systems, and many counties, especially in the Northwest, rely almost entirely on State and National Forest receipts for their school budgets. Because of present economic conditions, the counties fear they will greatly be affected by a drastic decline in receipts in FY 1982. The Bureau of Land Management receipts are considered even more important because they can be dedicated to the general use fund, which in some cases is approximately one-third of the general fund for the county. Lane County, which is the largest recipient of FS timber sales receipts, anticipates receipts for FY 1982 to be down approximately one-third to one-half of the previous year's receipts. This will have a drastic impact on the county's budgeting, which is budgeted on a July to June fiscal year. It was suggested that some of this loss of revenue might be recouped by implementation of small short term sales programs.

Additionally, a report by the Oregon Governor's Timber Strategy Panel which conducted public hearings in October and November 1981 concluded: (1) State and Federal Forest Services should during sale design and contract preparation defer costly project work that delays harvesting; (2) agencies should offer set sales with terms no longer than 3 operating years; and (3) agencies should strengthen important contract areas such as bidding qualifications, bonding, deposits, payment schedules, default procedures, and extension terms.

These recommendations appear to be in agreement with the FS's pending contact modifications which are discussed in detail later in this report.

The following Summary of Payments To the States reflect the aforementioned reduction in annual receipts from $278 million in FY 1979 to $230 million in FY 1981. The largest decline in receipts was experienced by the western states of Idaho, Oregon, and Washington.

SUMMARY OF PAYMENTS TO STATES FROM NATIONAL FOREST RECEIPTS--FY 1979-81

State	FY 1979	FY 1980	FY 1981
Alabama--------	$ 893,892.02	$ 952,876.75	$ 1,444,326.77
Alaska---------	3,573,699.04	6,528,080.25	3,446,290.31
Arizona--------	4,879,074.34	4,395,378.83	5,856,807.02
Arkansas-------	3,590,133.16	4,271,837.87	3,727,690.96
California-----	50,452,044.83	37,551,016.98	41,026,578.24
Colorado-------	1,896,532.08	1,957,927.03	1,805,801.58
Florida--------	1,285,895.72	1,614,694.81	1,564,731.18
Georgia--------	796,645.05	826,233.95	997,224.68
Idaho----------	13,804,903.73	10,314,553.65	9,066,232.03
Illinois-------	52,978.95	54,782.00	98,386.19
Indiana--------	105,870.95	67,039.36	115,223.27
Kentucky-------	210,543.32	183,669.53	203,837.41
Louisiana------	3,185,321.19	2,328,512.05	1,998,504.74
Maine----------	17,245.55	16,333.51	18,470.26
Michigan-------	729,628.63	827,948.56	807,638.31
Minnesota------	1,076,830.99	1,139,373.00	1,137,343.75
Mississippi----	5,025,070.78	5,682,029.17	5,781,472.74
Missouri-------	3,101,562.48	3,852,317.38	2,817,660.72
Montana--------	9,460,389.75	7,584,826.83	8,079,709.34
Nebraska-------	58,889.97	59,623.07	56,357.56
Nevada---------	255,229.30	310,545.59	285,596.69
New Hampshire--	253,183.84	241,861.69	275,461.10
New Mexico-----	2,892,355.28	2,428,874.99	2,483,085.24
North Carolina-	331,606.28	506,045.85	775,424.73
North Dakota---	63.23	83.17	64.22
Ohio-----------	80,938.75	60,343.73	96,364.57
Oklahoma-------	516,919.38	605,037.29	506,462.81
Oregon---------	121,081,427.06	98,888,365.36	95,112,708.07
Pennslyvania---	548,881.68	664,163.48	874,177.43
Puerto Rico----	7,295.49	6,574.92	7,660.09
South Carolina-	2,147,040.97	1,811,656.41	3,398,529.21
South Dakota---	675,140.85	713,073.24	508,571.80
Tennessee------	232,310.47	273,776.95	254,391.40
Texas----------	1,382,349.19	1,485,640.99	2,719,485.39
Utah-----------	917,949.11	1,107,936.45	975,903.18
Vermont--------	68,313.65	156,355.32	104,815.23
Virginia-------	181,439.72	251,469.14	388,050.52
Washington-----	40,288,844.32	32,708,540.02	29,396,778.66
West Virginia--	160,914.16	199,509.57	314,694.42
Wisconsin------	391,788.56	469,578.85	498,722.22
Wyoming--------	1,251,512.06	1,397,123.28	1,024,103.71
Total----------	$277,862,655.88	$234,495,610.87	$230,051,337.75

III. TIMBER SALES PROGRAM

FS timber appraisals in Region 6 reflect a cash basis but in reality the FS sells on very lenient credit terms with the purchaser controlling when he will cut, and how much he will pay for FS timber. FS estimates (cruises) of the quantity of timber to be sold are overstated by as much as 15.8 percent. The FS contracted price--bid by the purchaser--is also overstated by about 12 percent. The purchaser's bid price exceeds the FS appraised value by about 240 percent. Also, FS inventory of timber under contract (uncut under contract) with the purchasers could be overstated by as much as 15.8 percent or 2.6 BBF valued at about $650 million.

The FS timber sales program is established to achieve the policies set forth in the Multiple Use Sustained-Yield Act of 1960 (16 USC 528-531) and the Forest and Rangeland Renewable Resources Planning Act of 1974 as amended (16 USC 1601). In preparing and administering sales the objectives are:

(1) To prepare all sales in accordance with the applicable land and resources management plan.

(2) To administer all sales in accordance with the terms of the timber sale contract.

(3) To increase the utilization of available wood supplies to help meet the Nation's wood production needs.

The FS timber sales program has been fairly consistent over the past 20 years. Sales have been in 10 to 11 BBF range and harvesting (cut) somewhat less. The following is an FS schedule as of January 1982 showing sold and cut volume and dollar figures since 1940.

NATIONAL FOREST TIMBER CUT AND SOLD

	Timber Cut		Timber Sold	
F.Y. *	Volume-MBF	Value	Volume-MBF	Value
1940	1,740,271	$ 4,806,729	1,779,209	$ 4,671,541
1941	2,067,279	5,761,819	1,464,523	4,769,348
1942	2,204,749	6,109,097	2,839,416	8,195,727
1943	2,359,473	8,671,729	3,696,048	16,171,529
1944	3,333,167	14,154,983	2,858,465	12,121,348
1945	3,144,789	13,016,232	2,391,449	10,465,748
1946	2,729,708	11,490,318	2,687,018	10,626,293
1947	3,834,588	16,399,890	3,786,231	21,954,920
1948	3,758,885	21,054,111	3,741,856	30,275,736
1949	3,740,810	28,749,007	2,614,701	29,122,287
1950	3,501,937	30,714,292	3,434,114	32,980,017
1951	4,688,280	47,816,389	4,912,958	60,482,487
1952	4,418,530	59,341,209	12,975,274	80,002,439
1953	5,160,355	70,616,025	4,801,304	56,949,128
1954	5,365,113	65,407,400	5,367,655	60,380,691
1955	6,328,229	70,760,440	9,626,729	100,430,988
1956	6,907,043	97,619,548	6,837,262	129,306,477
1957	6,978,185	115,567,029	6,533,379	111,116,227
1958	6,420,701	94,187,973	13,292,643	112,583,811
1959	8,340,518	113,896,697	9,359,045	132,995,296
1960	9,366,897	156,423,791	12,167,180	170,892,642
1961	8,380,689	124,451,784	8,856,904	125,145,413
1962	9,032,237	128,905,266	10,325,872	133,660,089
1963	10,026,242	134,405,770	12,175,253	153,567,600
1964	10,954,193	151,074,949	11,681,508	171,925,104
1965	11,244,025	161,105,702	11,510,659	198,185,066
1966	12,138,401	195,590,242	11,382,967	226,014,528
1967	10,850,930	188,710,969	11,654,647	208,603,585
1968	12,128,225	239,311,589	11,651,566	274,253,980
1969	11,783,473	326,996,862	18,930,942	502,140,808
1970	11,526,725	307,609,817	13,382,025	317,302,394
1971	10,341,204	257,020,185	10,636,387	215,299,552
1972	11,700,364	381,956,590	10,339,486	328,436,311
1973	12,357,023	479,233,003	10,199,250	636,151,669
1974	10,958,393	508,615,355	10,241,085	902,608,483
1975	9,173,785	365,951,687	10,823,549	657,212,830
TQ-1976	3,431,964	209,937,583	1,535,301	96,005,949
1976	9,575,455	492,029,190	10,287,270	707,832,690
1977	10,481,536	732,546,790	9,919,695	987,416,476
1978	10,079,524	854,682,200	10,995,851	1,328,415,687
1979	10,376,955	968,033,445	11,330,376	1,962,624,421
1980	9,147,852	731,223,690	11,398,855	1,969,677,629
1981 1/	8,036,240	720,922,395	11,491,801	1,767,749,385

* 1940-1975 - Fiscal Year is July 1 to June 30.
Transition Quarter 1976 is July 1 to Sept. 30
1976-1980 - Fiscal Year is Oct. 1 to Sept. 30

1/ Preliminary

The following schedules indicate the volume sold and harvested by region for FY 1978 projected through FY 1982.

Volume Sold in Millions of Board Feet 1/

Region/FY	1978	1979	1980	1981 2/	1982 3/
1	1,029	1,106	1,133	891	1,188
2	387	362	323	343	365
3	386	365	335	412	418
4	382	334	364	306	397
5	1,940	2,164	1,921	1,805	1,900
6 westside	3,399	3,621	3,488	3,622	3,578
6 eastside	1,589	1,517	1,638	1,611	1,639
8	1,108	1,167	1,282	1,209	1,220
9	617	585	606	604	680
10	159	109	200	197	168
Total	10,996	11,330	11,290	11,000	11,553

1/ Excludes long-term sales, about 400 million board feet.
2/ Preliminary
3/ Budgeted

Volume Harvested in Millions of Board Feet

Region/FY	1978	1979	1980	1981 1/	1982 2/
1	945	994	836	891	900
2	282	288	250	246	250
3	380	339	365	265	300
4	386	434	306	315	350
5	1,775	1,818	1,450	1,228	1,350
6 westside	2,949	3,186	2,500	2,164	2,350
6 eastside	1,392	1,343	1,129	1,212	1,150
8	1,033	1,014	1,298	1,124	1,250
9	480	531	563	548	550
10	458	430	481	265	350
Total	10,080	10,377	9,178	8,258	8,800

1/ Preliminary
2/ Projection

The above schedules indicate that the Pacific Northwest Region (Region 6) has approximately 50 percent of timber sale activity. For this reason, review effort was concentrated in Region 6.

A. Region 6 Timber Sale Program

Region 6 since 1964 has sold and harvested about 50 percent of FS timber but has also constantly been close to the regions maximum potential harvest. The following schedule indicates Region 6 timber sale activity, the regions potential harvest, volume and value of timber sold, and volume and value of timber cut. The schedule also demonstrates the wide variance between the average value of thousand board feet of sold timber and average value of thousand board feet of cut timber (price purchaser actually paid as opposed to sold representing what the purchaser bid).

VOLUME AND VALUE OF TIMBER SOLD AND CUT
IN REGION 6 NATIONAL FOREST BY FISCAL 1964 TO 1980

FY	ANNUAL ALLOWABLE HARVEST MMBF 1/	TIMBER SOLD			TIMBER CUT		
		VOLUME MMBF 1/	VALUE M$	AVERAGE PER M	VOLUME MMBF 1/	VALUE M$	AVERAGE PER M
64	4,280.8	4,703.4	-	-	4,831.8	88,818.9	18.38
65	4,280.8	4,602.9	121,431.7	26.38	5,095.8	98,213.0	19.27
66	4,343.0	4,636.4	143,320.0	30.91	5,426.9	120,267.9	22.16
67	4,343.0	4,485.0	122,421.2	27.30	-	-	-
68	4,343.0	4,610.1	-	-	5,137.5	144,158.1	28.06
69	4,408.7	4,200.8	260,702.9	62.06	4,752.3	179,795.0	37.83
70	4,415.0	5,357.2	-	-	4,759.4	178,109.0	37.42
71	4,411.0	4,770.1	-	-	3,990.4	133,167.5	33.37
72	4,392.1	4,767.9	169,494.2	35.55	4,869.5	194,269.3	39.90
73	4,355.8	4,653.5	-	-	5,791.4	260,933.0	45.06
74	4,244.1	4,670.1	580,718.3	124.35	4,675.4	261,459.9	55.92
75	4,938.5	4,901.8	474,540.3	96.81	3,991.3	213,004.0	53.37
76	4,766.6	4,842.8	483,314.3	99.80	3,950.1	280,014.6	70.89
T Qtr	-	677.6	61,081.8	90.15	1,465.7	114,973.4	78.44
77	4,766.6	4,765.2	653,816.7	137.21	4,362.8	623,065.6	97.42
78	4,728.1	4,907.7	842,287.9	168.87	4,340.7	524,225.4	120.77
79	4,612.1	5,138.2	1,280,220.4	249.16	4,528.7	612,150.1	135.17
80	5,278.9	5,126.4	1,286,084.8	250.87	3,628.8	457,258.9	126.01

1/ Sawtimber and Small Convertible Products

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The above schedule indicates the stability in sold volumes, the decline in the harvested volume and the upward spiral of the average value of MBF of timber sold (price the purchaser bid for the timber). The bid value has increased from $99.80 per MBF in 1976 to $250.87 per MBF in 1980 or a growth of $151.07 per MBF for a 151 percent increase. Whereas for the same period (1976-80), the value of the timber cut--what the purchaser actually pays for--only reflects a 77 percent growth from $70.89 to $126.01. It should be understood that the purchaser only pays the Federal Government for the timber he cuts. To this end the amount sold is at best a "guess" of potential dollars the Government may receive. In all reality the Government very seldom receives the contract value of a timber sale in Region 6. A review of total gross figures from FY's 1940 to present indicates that this "shortfall" condition in actual receipts compared to contract prices has existed in almost every fiscal year for the combined regions of the FS.

National Forests in Region 6

Region 6 has 19 National Forests within its jurisdictional boundaries. Nine of the forests are classified as Westside and 10 Eastside. They are so classified because the nine forests are west of the Cascades and are primarily old growth douglas fir timber. The remaining 10 are classified Eastside because they are east of the Cascades and these forests primarily contain ponderosa pine.

Three of the Westside forests visited were Mount Hood, Willamette, and Gifford Pinchot which account for approximately 52 percent of Westside sold and approximately 47 percent Westside cut timber.

At two of the forests, Willamette and Mount Hood, the FS was requested on recently completed contracts to compare the cruised amount (estimated volume) versus the cut amount, and the bid price versus the price the Government actually received. The FS advised that the FS management information system could not produce this type of data, and the only way this data could be produced was to manually pull completed contracts and then analyze the award of timber sale (form 2400.17) and the final report in the transaction sales summary account (TSSA).

To keep the results of the analysis as statistically viable as possible, the two forest offices were requested to each randomly select approximately 25 recently completed typical contracts. The analysis of cruise versus cut volume was directed at Douglas fir because it is the most valuable species in Westside Forests.

1. Willamette National Forest

The Willamette National Forest annually sells approximately 800 MMBF and annually harvests from 470 to 690 MMBF. Currently the Willamette has about 2.3 BBF of timber uncut under contract valued at about $500 million. These timber sales are larger than all states except Idaho, California, Washington, and Oregon.

The 24 contracts provided by the FS amounted to 165 MMBF of sold and 134 MMBF of cut or approximately 21 percent of the volume sold each year by Willamette National Forest. The following schedule is an analysis of these 24 contracts:

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WILLAMETTE COMPLETED CONTRACTS 1980-81

Contract Term	Appraisal	High Bid	Dollars Received	Dollar Difference	Percent Difference	Species Bid		Volume Cruised MBF	Volume Cut MBF	Under/ Over MBF	Percent Difference
6/30/76-	$ 700,788	$1,336,596	$1,090,260	$ 246,336	18%	D—	259.00	4,800	3,800	-1,000	21%
3/31/80						WRC-	47.20	600	752	152	
						H&O-	60.10	600	500	-100	
						PAM-	12.09	2,400	2,398	0	
6/8/77-	1,090,000	1,835,589	1,005,937	829,652	45	D—	204.16	8,900	4,119	-4,781	54
3/31/81						H&O-		800	569	-231	
						PAM-		100	72	-28	
4/1/77-	1,105,429	3,028,001	2,983,755	44,246	1	D—	335.88	8,200	8,057	-143	2
11/5/80						SPU-	150.63	1,500	1,523	23	
						PAM-	14.95	3,200	3,196	0	
2/28/77-	2,106,656	4,390,196	3,349,933	1,040,263	24	D—	334.15	12,400	9,259	-3,141	25
3/31/81						H&O-	93.88	2,000	2,098	98	
						PAM-	15.52	3,800	3,799	0	
3/9/77-	803,120	1,446,122	1,342,429	103,693	7	D—	187.58	3,100	2,781	-319	10
3/31/80						H&O-	95.22	2,100	2,334	234	
						PAM-	18.05	1,200	1,198	0	
9/28/76-	959,238	1,484,580	1,116,382	368,198	25	D—	266.00	4,600	3,257	-1,343	29
11/5/79						H&O-	80.00	2,900	2,763	-137	
						PAM-	20.70	1,400	1,392	0	
6/14/76-	882,530	1,520,608	1,345,635	174,973	12	D—	276.00	4,900	4,252	-648	13
10/29/80						C—	72.63	700	754	54	
						H&O-	69.17	1,100	1,099	0	
						PAM-	25.80	1,600	1,599	0	
6/10/76-	2,151,390	3,541,734	2,754,093	787,641	22	D—	293.00	11,400	8,665	-2,735	24
3/31/81						C—	74.49	1,100	1,253	153	
						H&O-	82.85	700	727	27	
						PAM-	19.25	3,200	3,197	0	
4/1/77-	865,140	2,012,510	1,717,243	295,267	15	D—	260.00	4,100	3,589	-511	12
3/31/81						H&O-	200.00	4,700	2,888	-1,812	
						PAM-	6.51	1,000	998	0	

WILLAMETTE COMPLETED CONTRACTS 1980-81 (con't.)

Contract Term	Appraisal	High Bid	Dollars Received	Dollar Difference	Percent Difference	Species Bid	Volume Cruised MBF	Volume Cut MBF	Under/ Over MBF	Percent Difference
6/22/76-3/31/80	$ 535,900	$1,072,966	$1,015,483	$ 57,483	5	D— 305.00	2,800	2,690	-110	4
						H&O- 38.87	4,600	3,982	-618	
						PNM- 18.27	2,200	2,198	0	
6/30/76-3/31/80	598,452	1,159,146	1,107,169	51,977	4	D— 124.82	2,500	2,404	-96	4
						H&O- 182.50	4,600	4,380	-220	
						PNM- 4.22	1,800	1,799	0	
2/9/77-10/31/80	1,914,949	3,467,374	2,990,952	476,422	14	D— 291.78	10,500	8,796	-1,704	16
						H&O- 76.97	4,300	4,569	+269	
						PNM- 16.91	4,300	4,298	0	
5/20/76-3/31/81	1,046,897	1,370,277	935,157	435,120	32	D— 140.00	7,600	4,716	-2,884	38
						H&O- 47.63	6,400	5,947	-453	
						PNM- 2.89	500	499	0	
6/24/76-3/31/81	1,283,111	1,984,823	1,966,142	18,681	1	D— 276.00	6,600	6,514	-86	1
						H&O- 65.63	1,700	1,776	+76	
						PNM- 13.96	3,700	3,699	0	
1/24/78-2/5/81	1,196,530	2,308,172	2,047,931	260,241	11	D— 330.50	6,400	5,334	-1,066	17
						H&O- 84.28	2,100	2,883	+783	
						PNM- 79.92	200	196	4	
6/28/76-9/30/80	660,728	972,776	1,109,926	+137,150	+14	D— 210.00	4,400	4,945	+545	+12
						H&O- 68.11	400	734	+334	
						PNM- 15.38	1,400	1,398	0	
3/8/78-10/31/80	2,139,457	3,673,882	3,201,551	472,331	13	D— 281.00	12,300	10,393	-1907	16
						H&O- 99.58	1,900	2,536	+636	
						PNM- 25.80	1,100	1,099	0	
8/24/77-4/3/81	1,744,997	2,518,957	2,070,922	448,035	18	D— 248.00	8,800	6,867	-1,933	22
						H&O- 129.73	2,300	2,544	+244	
						PNM- 9.09	4,200	4,198	0	
6/30/76-6/30/80	695,143	1,082,547	753,448	329,099	30	D— 202.00	4,900	3,256	-1,644	34
						H&O- 43.13	1,900	1,968	+68	
						PNM- 12.00	900	897	0	
5/17/77-6/3/81	1,769,020	3,728,442	4,166,440	+437,998	+12	D— 320.10	11,300	12,585	+1,285	+11
						H&O- 93.30	1,000	1,284	+284	
						PNM- 30.02	600	599	0	

WILLAMETTE COMPLETED CONTRACTS 1980-81 (con't.)

Contract Term	Appraisal	High Bid	Dollars Received	Dollar Difference	Percent Difference	Species Bid	Volume Cruised MBF	Volume Cut MBF	Under/ Over MBF	Percent Difference
7/2/76-11/5/80	$1,285,432	$1,933,524	$1,357,732	$ 575,792	30	D— 238.00	7,400	4,769	-2,631	36
						H&O- 66.59	2,000	2,756	+756	
						PAM- 18.64	2,100	2,099	0	
4/25/77-3/6/81	953,547	1,778,028	1,487,298	290,730	16	D— 280.05	3,700	2,933	-767	21
						H&O- 200.10	3,600	3,220	-380	
						PAM- 24.27	900	897	3	
6/30/76-5/5/80	809,067	1,176,423	1,015,077	161,346	14	D— 236.00	4,400	3,529	-871	20
						H&O- 60.61	1,900	2,628	+728	
						PAM- 14.29	1,600	1,597	3	
4/1/77-7/7/81	2,265,298	3,675,161	2,950,811	724,350	20	D— 370.00	9,100	7,344	-1,756	19
						H&O- 85.26	3,100	2,225	-875	
						PAM- 8.95	4,900	4,900	0	
TOTAL	$29,562,819	$52,498,434	$44,881,706	$7,616,728			165,100	134,854	30,246*	

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* Douglas fir only.

The analysis of the above 24 contracts showed that for the Douglas Fir only:

-- Of the 24 contracts, 22 had undercuts; and 2 had cut more than was cruised.

-- The gross overcruise for the 22 was 21 percent with the most significant difference being 54 percent. The breakdown of the percentage range of overcruise for the 22 contracts were:

Range of Overcruise	Number Contracts
0 - 10 percent	5
11 - 20 percent	7
21 - 30 percent	6
31 and over	4

The two contracts with undercruise were for 11 and 12 percent.

-- The FS appraised the timber in the contracts for $29,562,819. The high bid purchasers bid $52,498,434 but actually paid $44,881,706 or a 15 percent monetary shortfall on the dollars they contracted to pay. The largest dollar shortfall for any contract was $1,040,263 (bid $4,390,196, received $3,349,933). The variation between the highest amount bid and the amount actually received for the timber sold, expressed as a percentage, is shown below for the 22 contracts incurring a monitory shortfall:

Range	Number Contracts
0 - 10 percent	5
11 - 20 percent	10
21 - 30 percent	5
31 and over	2

-- The bid value was 177 percent greater than the appraised value.

-- There is no correlation between the FS appraised value and the high bid. It is questionable whether or not the FS appraised value is the fair market value of timber sold. Appraised value appears to be the floor or minimum, not the fair market value.

-- There is no correlation between bid price and monies the FS actually received.

-- Average term of the 24 contracts was 45 months.

-- Net cruising error of 18 percent (22 overcruised and 2 undercruised).

2. Mount Hood National Forest

The Mount Hood National Forest annually sells about 400 MMBF and harvests about 300 MMBF. Currently Mount Hood has about 1,275 MMBF under contract valued at about $275 million. The 21 contracts provided for review were for 127 MMBF of sold and 112 MMBF of cut or approximately 32 percent of the average annual volume of timber sold by Mount Hood.

MOUNT HOOD CONTRACTS TERMINATED FY 1980-81

Contract Term	Appraisal	High Bid	Dollars Received	Dollar Difference	Percent Difference	Species Bid	Volume Cruised MBF	Volume Cut MBF	Under/ Over MBF	Percent Difference
4/11/74-3/31/80	$1,249,827	$3,639,065	$3,223,923	$415,142	11%	D— 407.00	8,300	7,197	-1,103	13%
						H&O- 83.83	3,000	3,371	371	
						PAM- 3.79	2,500	2,574	74	
9/29/77-3/31/79	402,586	771,094	828,083	+56,989	+7	D— 260.50	2,800	2,988	188	+7
						H&O- 68.17	500	616	116	
						PAM- 42.51	179	179	0	
10/8/74-3/31/80	1,150,876	2,216,776	2,652,964	+436,188	+20	D&O- 200.00	11,000	11,174	174	+2
						PAM- 25.04	670	520	-150	
10/30/75-9/30/79	852,849	2,495,474	2,136,435	359,039	14	D— 283.05	8,500	7,191	-1,309	15
						H&O- 30.35	2,200	2,575	375	
						PAM- 25.21	900	898	0	
10/3/73-3/31/70	1,246,617	3,413,520	3,139,099	274,421	8	D— 242.25	8,100	6,938	-1,162	14
						H&O- 322.25	4,500	5,422	922	
						PAM- 1.30	900	869	-31	
8/27/75-3/31/80	407,196	1,188,732	592,685	596,047	50	D— 330.00	3,200	1,469	-1,731	54
						H&O- 39.86	3,200	2,578	-622	
						PAM- 25.90	200	200	0	
12/18/74-3/31/79	651,793	1,768,702	2,065,840	+297,138	+17	D— 212.00	8,100	9,434	1,334	+16
						GF&O 47.87	600	1,001	401	
						PAM- 18.08	1,200	1,252	52	
5/12/76-4/15/80	1,558,472	3,583,574	3,179,156	404,418	11	D— 275.00	6,400	5,559	-841	13
						H&O- 150.00	11,900	10,747	-1,153	
						PAM- 41.86	900	900	0	
6/2/77-3/31/79	720,138	1,144,294	903,250	241,044	21	D— 116.78	4,500	3,165	-1,335	30
						NF&O 154.00	3,800	3,247	-553	
						PAM- 41.98	800	799	0	
10/30/75-10/16/79	852,849	2,495,474	2,136,435	359,039	14	D— 283.05	8,500	7,191	-1,309	15
						H&O- 30.35	2,200	2,585	385	
						PAM-	900	898	-2	
11/13/74-3/31/79	551,283	1,068,918	1,066,076	2,842	0	D— 217.00	4,500	4,397	-103	2
						H&O- 61.31	1,200	1,526	326	
						PAM- 20.94	900	900	0	

MOUNT HOOD CONTRACTS TERMINATED FY 1980-81
(con't.)

Contract Term	Appraisal	High Bid	Dollars Received	Dollar Difference	Percent Difference	Species Bid	Volume Cruised MBF	Volume Cut MBF	Under/ Over MBF	Percent Difference
3/6/75-3/31/79	$ 118,744	$ 728,240	$ 601,607	$126,633	17	D— 154.50	4,700	3,880	-820	17
						H&O- 2.00	300	397	97	
						PAM- 2.98	500	500	0	
6/16/76-4/2/80	654,045	1,451,265	1,430,039	21,226	1	D&O- 240.00	6,000	5,911	-89	1
						PAM- 22.09	510	507	-3	
3/28/79-3/31/81	755,466	1,920,214	1,429,165	491,049	26	D— 600.00	2,600	1,916	-684	26
						NP— 79.13	2,550	2,121	-429	
						H&O- 90.26	1,750	1,207	-543	
						PAM- 9.55	50	49	-1	
9/11/79-3/31/81	728,567	2,165,057	2,248,639	+83,582	+4	D— 816.00	2,200	2,327	127	+6
						H&O- 102.59	3,600	3,433	-167	
						PAM- 7.62	70	69	0	
3/9/78-1/31/81	1,731,272	2,659,304	2,574,754	84,550	3	D— 235.00	9,600	8,388	-1,212	13
						H&O- 113.60	3,500	4,346	846	
						PAM- 7.13	800	800	0	
10/12/78-6/30/80	1,093,217	2,806,629	1,985,954	820,675	29	D— 380.00	4,300	3,039	-1,261	29
						H&O- 175.00	6,700	4,746	-1,954	
						PAM- 3.71	35	34	0	
3/13/75-1/28/81	785,533	2,891,780	2,797,942	93,838	3	D— 233.00	12,100	11,665	-435	4
						H&O- 24.35	2,100	2,407	307	
						PAM- 14.23	1,500	1,475	-25	
9/24/76-1/13/81	397,187	435,197	255,002	180,195	41	D— 84.53	1,900	1,167	-733	39
						H&O- 54.00	4,200	2,010	-2,190	
						PAM- 26.55	1,800	1,798	-2	
5/14/76-3/31/80	548,008	1,551,483	1,455,098	96,385	6	D— 275.00	5,500	5,096	-404	7
						H&O- 33.53	1,100	1,532	432	
						PAM- 1.75	1,200	1,199	0	
3/29/78-3/31/81	890,000	1,181,660	555,179	626,481	53	D— 208.00	4,270	1,653	-2,617	61
						TF&O 100.00	2,730	1,908	-822	
						PAM- 102.50	200	200	0	
TOTAL	$17,346,525	$41,576,452	$37,257,325				127,070	111,745	15,325*	

* Douglas fir only.

The analysis of the 21 completed contracts disclosed data very similar to that developed in Willamette National Forest. The data indicates:

-- In 17 of the 21, the amount received was less than the contracted price. The largest dollar difference was $820,675 or 29 percent less than the contracted price. Percentagewise the largest shortfall was 53 percent or a shortfall of $626,481 on a bid of $1,181,660.

-- A net 10 percent shortfall of the estimated value of timber under contract. Of the $41.6 million under contract, only $37.3 million was harvested.

-- Contractors bid $41.6 million for FS timber appraised at $17.4 million or 240 percent more than the FS appraised value.

-- Of the 127,070 MBF of Douglas fir cruised, 111,745 MBF was actually harvested. This 15,325 MBF represents a shortfall of 12 percent.

-- The average FS appraised value of Douglas fir was $102.62 per MBF (High $163.05, Low $34.35). The average selling value as computed by the FS appraiser was $316.82 MBF (High $534.16, Low $160.15). The average bid value was $276.40 MBF (High $316.00, Low $34.35).

-- Of the estimated 127,070 MBF of Douglas fir estimated to be sold in the 21 contracts, 17 of the contracts contained undercuts of 17,148 MBF and 4 contracts overcuts of 1,823 MBF. The gross cruising error rate was 14.9 percent.

In summary, of the 45 contracts provided for review, 39 had overcruises and 6 had undercruises with respect to the Douglas fir species. The rather high percentage, 87 percent, of overcruises was somewhat mystifying to cognizant FS officials as most believe that over the long run overcruises and undercruises tend to even out.

The real concern is the net cruising error of 15.8 percent that was found in the 45 contracts. The gross error, the total of overcruise and undercruise, was also quite high at 16.8 percent.

A consultant report commissioned by the FS and dated September 30, 1981, somewhat echoes the observation that FS cruise volumes differ from what is actually cut and paid for by the purchaser. The consultant report differed in that the consultant found large differences equally divided into over and undercruises rather than the vast majority of the cruises being overcruised. The consultant report stated in part that:

> "Appraised volumes differ widely from volumes actually cut from Forest Service timber sales. For 842 Westside timber sales that have been fully cut and closed out, the record shows that the actual cut is only 1.8% below the appraised volume. This record suggests an astonishingly high degree of cruise accuracy. However, on a sale by sale basis we find nearly offsetting large errors of over- and under-appraised volumes. The errors become apparent when the absolute values of the appraisal errors are averaged. When the algebraic sign of the appraisal error is ignored we find that the average absolute difference between the appraised volume and actual cut was 36%. Such cruise errors contribute to an explanation of high bid-appraisal ratios. Where bidders perceive that a biddable species is incorrectly cruised and that the appraised volume for one or more species is overstated, then bidding will often be concentrated in that species. If it is in fact over-appraised in volume, then the final cost to the buyer is less than indicated by the bid-appraisal ratio. This follows from the fact that payments to the Forest Service are made on the basis of volumes actually cut by species." [Underscoring supplied]

The report also stated that:

> "Timber sale evidence suggests that (1) bidders invest resources in timber sale cruises, (2) the accuracy of these cruises is superior to Forest Service estimates, (3) when the Forest Service under-cruises sale volume, firms believe in the reliability of their own cruises and utilize this information in the form of increased participation at timber sales, and (4) over-cruised sales do not disturb bidder intentions to qualify because (a) the appraised volume error factor is lower than the average for all timber sales, (b) firms gain increased flexibility in timing their harvest schedules to milling needs or market demands, and (c) bidders are aware that by bidding on the overcruised species (if it is a biddable species) they increase their chances of winning the sale, but the actual cost of timber is less than indicated by the bid-appraisal ratio or total bid value."

Cognizant FS officials expressed concern regarding the high cruise error but generally did not offer any explanation as to what possibly could have caused the wide discrepancy in cruise versus cut. One official, however, offered that some of the undercut could have found its way into the very inexpensive PAM--unmerchantable waste material. He advised that this would only occur if the contract administrator did not notice the split and damaged timber in the piles of PAM. This occurs, for example, when a purchaser only takes the three best logs from a tree and splits or damages the less valuable fourth log. This damaged fourth log goes to the PAM pile. The PAM is paid for at flat rates ranging from as low as $23 per acre to several hundred dollars per acre. This could explain about 3-5 percent of the cruising error.

The net effect of this occurrence would be the purchaser getting the fourth log at no cost instead of paying as high as $275 MBF.

Another explanation of the cruising error could occur in the scaling by the third party scaler. The allowable variance that a check scaler will allow is 2 percent by volume. A FS check scaler advised that he very seldom ever sees a log scaled in favor of the Government. The overwhelming majority of his check scaling indicates the acceptable variance going to the purchaser. He advised that this occurrence amounts to 1-1.5 percent of volume.

B. Uncut Timber Inventory Under Contract

Along with the highly visible cut and sold reports (reflecting value and volume of timber cut and sold by totals, by regions) the FS issues an inventory of the timber the purchaser has under contract and has yet to cut and pay for. This report is referred to as Uncut Volume Under Contract. The uncut volume under contract report along with the cut and sold report are the statistical reports most commonly cited in FS publications. The following is the FS Uncut Volume Under Contract by region from 1971 through 1981.

UNCUT VOLUME UNDER CONTRACT BY REGION AND FISCAL YEAR
(Volume in million board feet local scale with long-term sales removed)

REGION	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981[2]
1	3,744	3,480	3,241	3,276	3,310	3,361	3,048	2,936	2,952	3,194	3,325
2	1,181	986	864	798	931	998	930	891	885	1,034	1,057
3	940	958	924	442	434	643	763	800	842	846	995
4	1,670	1,445	1,410	1,110	1,392	980	1,110	1,007	913	942	750
5	4,260	4,628	4,649	4,450	4,869	5,041	4,960	5,125	5,150	5,835	5,884
6	12,118	12,535	11,396	9,996	12,302	11,794	12,032	12,486	13,943	14,446	16,295
8	1,854	1,803	1,598	1,684	1,951	1,902	2,156	2,231	1,926	1,910	1,988
9	2,052	1,819	2,015	1,841	2,100	2,011	1,990	1,810	1,830	1,945	1,937
10	1,385	1,185	665	92	96	160	441	601	251	344	440
Total[1]	29,204	28,839	26,762	23,689	27,385	26,890	27,430	27,887	28,692	30,496	32,671

[1] All long-term sales removed including Alaska.

[2] Tentative

By overcruising in merchantable timber uncut under contract totals, the FS in Region 6 has seriously overstated this important benchmark by as much as 2.57 BBF or 15.8 percent. This inventory sold and under contract and valued at $650 million of yet to be cut timber could adversely impact on the FS decision to increase future allowable cut totals, by assuming that the contractors have so many board feet in inventory, there is little need to offer more timber for sale. The attitude of "they can't cut what they have under contract" was a prevailing FS attitude noted during the review.

IV. MOUNT ST. HELENS SALVAGE AND SALES

The FS has permitted skewed bidding to occur at the Mount St. Helens timber salvage sale. Skewed bidding will result in less than the high bidder for the most valuable species receiving the timber sale contract. Also bids have ranged as high as 4,512 percent over the FS appraised value indicating serious appraisal differences. These events could result in substantial losses in revenue to the Government.

On May 18, 1980, a lateral explosion and avalanche destroyed the northern portion of Mount St. Helens. The blast devastated more than 235 square miles of National Forest, State, and private land north of the mountain; all vegetation was killed, trees were destroyed or blown down. Several smaller eruptions, some as late as March 1982, also have occurred.

In October 1981 the final Environmental Impact Statement (EIS) for the area addressed numerous problems associated with the havoc caused by the disaster, among which were problems associated with the 61,200 severely damaged acres of National Forest land and 89,400 acres owned by the State of Washington, private interests, and individuals.

The EIS states that of the 1.6 BBF of timber included in the blast area, 540 MMBF were destroyed and about 1,063 MMBF of merchantable size material remain in the area. With each passing month, a decline in the value of potentially salvageable timber occurs due to decay. By the end of the third year on the ground, the value of the hemlock will have declined approximately 33 percent. In addition to the overall economic loss, the 4,300 acres of standing dead trees and 19,200 acres of blown-down timber on National Forest lands present a serious fire hazard and potential insect threat to adjacent lands and green timber.

In an attempt to stop further environmental and physical damages and to recover available resources for economic benefits, the Forest Service has adopted a land management plan for management of the Mount St. Helens area. Included in the plan is the harvesting of 822 MMBF of fallen timber.

Questionable Sales Program

As of November 30, 1981, 53 sale offerings for 962 MMBF have been identified. Of the 53 sale offerings, approximately 18 contracts have been awarded and 308 MMBF of timber have been sold. The following schedule shows the great disparity between contractor bids and FS appraised values by species (Douglas Fir and Hemlock) for 10 of the 53 sale offerings.

Sale and Value		Douglas Fir	Hemlock
		(per MBF)	
Sale #6			
Appraisal------	$ 124,720	$ 11.64	$ 2.00
Bid------------	1,261,056	18.00	130.00
Sale #83			
Appraisal------	1,328,084	110.68	9.75
Bid------------	3,545,294	118.00	235.00
Sale #57			
Appraisal------	38,000	3.00	2.04
Bid------------	1,714,600	164.00	95.00
Sale #5			
Appraisal------	35,600	3.00	2.00
Bid------------	1,434,400	272.00	2.00
Sale #89			
Appraisal------	1,106,142	113.38	2.00
Bid------------	3,490,142	113.38	300.00
Sale #80			
Appraisal------	253,079	41.25	2.00
Bid------------	2,919,054	42.00	244.00
Sale #4			
Appraisal------	367,155	57.30	2.00
Bid------------	1,279,175	57.50	140.00
Sale #45			
Appraisal------	1,021,380	197.64	19.67
Bid------------	1,657,762	200.00	347.00
Sale #88			
Appraisal------	51,155	3.00	2.00
Bid------------	954,155	3.00	260.00
Sale #79			
Appraisal------	1,000,590	106.43	2.00
Bid------------	3,786,740	106.43	272.50

The sale offerings selected illustrate various discrepancies which are more or less typical of the 53 Mount St. Helens offerings by the FS. Some of the discrepancies are discussed below.

Sale #5 was appraised by the FS at $35,600 and yet the high bid by the successful bidder was for $1,434,400. The value of the species was either grossly understated by the FS at $3 per MBF of Douglas fir, or grossly overstated by the bidder at $272 per MBF. On this sale the negative appraised value of the hemlock reduced the potential value of the Douglas fir from $82.55 MBF to $3 MBF (see appraisal report in Appendix C).

Sale #57 reflected the same wide differences--appraised value $38,000; bid value $1,714,600 or an over bid percentage of 4,512 percent. The species were appraised at $3 MBF for Douglas fir and bid $164 MBF and $2.04 for hemlock and bid $95. In this sale the negative appraised value of the hemlock resulted in the Douglas fir's appraisal being reduced from $77.20 per MBF to $3.00 per MBF (see appraisal report in Appendix C).

In other sales the high bidder for the most valued species, Douglas fir, did not receive the bid because the successful bidder skewed the bidding by bidding up the less desirable hemlock species. This skewed bidding is even more flagrant when one considers that the hemlock after being on the ground 3 years has decreased in value by 33 percent due to decay and if left on the ground 4 years will have decayed 65 percent, making the species almost worthless. Skewed bidding occurred on sales #4, #6, #45, #79, and #80 (See appraisal reports in Appendix C). In each of these sales the Government's interests were not adequately protected and will result in substantial monetary losses.

In these skewed bidding cases the successful bidder will probably not harvest the less valuable hemlock because of its decayed condition. This has the effect of the most valuable species--Douglas fir--being purchased by a bidder other than the high bidder and the Government being underpaid for this asset. A third party scaler who has scaled Mount St. Helens Douglas fir stated that the fir is in excellent condition and is quite valuable.

It is interesting to note that the Portland Regional Office was also very concerned with this skewed bidding trend. On July 16, 1981, before most of these sales were made, the Regional Office advised the Forest Supervisor that:

> "We have reviewed the 2400-17's on a couple of the Volcano timber sales from the St. Helens Ranger District. The Paradise II and Clearwater II sales show that some of the bidders are really overbidding the whitewoods (hemlock & true firs). In the Paradise II sale, the volume of whitewoods was less than 25% of the sale volume and should have been fixed rated on the advertisement and bid form. One bidder bid up the Douglas-fir and the apparent high bidder bid up the H&O group. On these salvage sales we don't want to be put in the position that after cut out is known, we may have awarded to the second or third high bidder.
>
> "We recommend that you fix rate the whitewood groups no matter how much of the sale volume this group represents. All bidders would be bidding on the Douglas-fir and then there wouldn't be any doubt who is the high bidder."

This direction was not followed and, as a result, the Federal Government received substantially less for Mount St. Helens' timber.

Also, the failure to fix rate the hemlock and exclude it from bidding resulted in some cases; sale #6, for example, of the negative value hemlock being offset against the fir. In effect causing the appraised value of the fir to be reduced by $66.10 per MBF in order to make the hemlock have a positive base rate of $2 MBF. In this particular sale--if the forest supervisor had followed the suggestion of the regional office the H&O would not have been part of the bid and the fir's appraised value would have been $77.74 not $11.64 per MBF. The successful bidder would have been bidder #3 who bid $100 MBF for fir as opposed to $18 MBF for the successful bidder.

For this sale the Government would have received $760,000 for the 7,600 MBF of fir instead of $136,800 offered by the successful bidder. Also, the $136,800 is probably much closer to the amount the Government will eventually receive as opposed to the successful bid amount of $1,261,056.

In most instances the hemlock, because of decay, will become part of the fix rated PAM. In effect, the Government will receive little or no value. In sale #6 the successful bidder who bid $130 for 8,500 MBF of hemlock could end up paying nothing for the hemlock even though his overall bid of $1,261,056 included $1,105,000 ($130 multiplied by 8,500 MBF) for the hemlock. The total price he may end up paying is only $156,056 as opposed to his successful bid of $1,261,056.

V. DO FS APPRAISALS REFLECT FAIR MARKET VALUE?

The FS appraises on a cash basis but sells on lenient term basis, and the appraisals do not reflect the value of the lenient terms. This practice has contributed to the substantial overbids received in Region 6. Moreover, since appraisals are not being based on comparable sales or reflecting the "overbids"--difference between appraisal and high bid--the FS because it must sell at the appraised value at a Cooperative Sustained Yield Unit has incurred losses of about $38 million over the past 3 years.

The National Forest Management Act of 1976 (P.L. 94-588) states in part that the "Secretary may sell at not less than appraised value, trees, portion of trees or forest products located on National Forest System lands."

Title 36 USC Section 223.4--Parks, Forests, and Public Property, further amplifies appraised value by tying it into fair market value by stating that:

> "The objective of National Forest timber appraisals is to estimate fair market value."

The Uniform Appraisal Standards issued by the Interagency Land Acquisition Conference in 1973 defines fair market value as:

> "Fair Market value criterion: Under established law the criterion for just compensation is the fair market value of the property at the time of taking. 'Fair market value' is defined as the amount in cash, or on terms reasonably equivalent to cash, for which in all probability the property would be sold by a knowledgeable owner willing but not obligated to sell to a knowledgeable purchaser who desired but is not obligated to buy * * *. The cash or on terms reasonably equivalent to cash requirement is important and numerous courts have noted the factor." [Underscoring supplied]

A study on Fair Market Value Estimates, dated October 31, 1980, stated in part that:

> "Since the total bid price for a pay-as-cut timber sale is not a cash equivalent, adjustments must be made on them for the time value of money * * *. What is the cash equivalent of a pay-as-cut national forest timber sale contract on the day it is awarded to a successful bidder? Correct valuation of a contract of the kind obviously involves the determination of the present worth of expected costs and revenues which are to be incurred or received at some future date. An income approach must be incorporated into the valuation procedure. The income to valuation requires the determination of the present net worth of future cash flows."

Department of Justice (DOJ) officials advised the primary reason for overbids is that FS appraisals are made on a cash basis but the FS sells on term basis, and until FS adjusts their appraisals to reflect the value of the terms or the terms are changed, the bids will continue to greatly exceed the FS appraisals.

This cash value on a term sale presents additional problems in condemnation cases. In these cases comparable sales are sometimes used to establish fair market value. DOJ advised that when a FS sale is used as a comparable sale, DOJ must reduce the term sale to a truly cash sale. FS appraised value is very close to the cash value of the timber but since no cash changes hands until several years hence, therefore, DOJ is required to compute the present worth of the terms. For example, in a recent redwood sale the FS appraised the timber at about $110 per MBF. The high bidder bid $710 per MBF. In a current condemnation case involving the Government taking land containing some redwood, the $710 MBF sale was used as a comparable sale. The DOJ attorney advised that he must now back out of the value of the terms since DOJ is required to pay cash for the condemnation. A cash sale and a term sale are not comparable, so adjustments must be made to equalize the value of cash. It should be noted that the definition of fair market value is "the amount in cash or terms reasonably equivalent to cash." Obviously FS appraisals reflect a cash basis but their sales are made on a very lenient term basis. This fact makes it very questionable if FS appraisals reflect fair market value of FS timber.

A. Revision of Appraisals

In comparable sales method, the marketplace indicates the most recent value received by the willing seller from a willing buyer. FS might treat the timber in the same manner as they sell or trade land. This approach would reflect what the market is willing to pay. If no bids are received by FS, the marketplace has indicated that the asking price is too high. Downward adjustments to the appraisal could then be made.

B. Appraisals--An Exercise In Futility

Throughout the review information was received to the effect that it makes little difference what the appraisals say or the method used since the FS receives monies well in excess of the FS appraisal. This is basically valid in most cases, however, there are situations such as the Shelton Cooperative Sustained Yield Unit when the timber is sold at the appraised value. In this situation cognizant FS officials advised that even the industry is concerned about the unfair advantage the "cheap" timber is presenting.

C. Shelton Cooperative Sustained Yield Unit

The Sustained Yield Forest Management Act of March 29, 1944, provided for a cooperative sustained yield unit in which private land and Federal land are joined in one jointly managed unit.

The cooperator committed his lands to a joint management plan. In exchange, he had first refusal on any public timber sale advertised for sale in the unit, at the appraised price. The allowable annual cut in the unit is about 115 MMBF. Appraisals of the unit are to be made in the same manner as sales outside the unit.

An analysis of several sales outside the Shelton Unit indicated that the bids received exceeded the FS appraisals by about 261 percent.

For the 3-year period the Shelton Unit sales for 437,345 MBF totaled $24,136,930. By applying the 261 percent overbid average to the $24 million total, the Government would have received $62 million or an increase of $38 million.

In most cases overbids appear to minimize the value of appraisals, however, the Shelton Unit is the exception. If the FS had utilized the comparable sales appraisals or even if the overbids were reflected in the appraisal, substantial losses in revenue would have been avoided.

VI. TIMBER SALES PROCEDURES

The FS timber sales procedures are diverse and unique to each region; in effect there appear to be several FS's selling timber each in its own way. These differences which have been covered by numerous reviews include the appraisal practices by which a value is assigned to the timber, methods utilized to estimate the volume of timber to be sold, and the procedure utilized to determine the volume of timber for which the contractor will pay.

Delegation of authority for commercial timber sales is made by the Chief of the FS to the nine regional foresters. Delegations are made depending on the size of the region and are stated in terms of board feet and range from 20-50 MMBF. Sales exceeding the regional limits require the FS chief's approval. In turn the regional foresters delegate authority to the forest supervisor. The forest supervisor is the "key man," who has the authority to authorize the vast majority of the timber sales for the FS. He may, however, delegate the authority to authorize small timber sales to district forest rangers who have the experience and ability to administer them. These latter sales are usually $2,000 to $10,000 in value.

The diversity of FS timber sales procedures in each region is not in their line of authority, but in the methods followed with sales planning, preparation, and administration. For example, Regions 1 through 6 and Region 10 use an analytical method of appraisal, while Regions 8 and 9 use a transaction evidence appraisal (TEA). Analytical appraisal is the method of backing out the purchasers cost from a finished product mill price to establish the appraised value. TEA is the use of comparable recent timber sales data to establish the appraised value.

Another notable difference is that Regions 8 and 9 use a presale tree measurement system in which the volume is computed prior to the offering of the proposed sales area. The purchaser pays for this volume. On the other hand, Regions 1 through 6 and 10 utilize an estimated volume in their presales preparation but are paid on the actual volume cut by the purchaser, through the "scaling" process. Regions 8 and 9 use sealed bids, while the other regions have the prospective purchasers submit a sealed bid to qualify for an oral auction. At the oral auction the timber is actually sold.

The FS utilizes a "gate system" for the purposes of timber sales planning and administration. The gate system follows a sequence of planning and operation steps of which designated activities must be accomplished prior to proceeding to the next sequence. The gate system reflects the timber sale process from a gleam in someone's eyes to the cutting of the timber and hauling of the logs to the mills. In this report, Regions 6 and 8's adaptation of the gate system was utilized for comparison of the diversity of the different FS sales procedures.

A. Cruise/Scale Sale--Region 6

Region 6 sells approximately 5.4 BBF per year, which is almost one-half of the timber sold by the FS annually. The majority of Region 6's forests contain "old growth-virgin timber."

The following is a typical sequence for sales in the 6-8 MMBF range. Time periods for smaller sales will be shorter, and for planning purposes after the award of the sales contract the work to be performed on logging operations is largely controlled by the purchaser. The purchaser controls the length of time in which he will complete his road construction and logging operations. Extension of contract lengths is quite common and ranges from 10 days to 2 years.

Summary of Timber Sales Gate System Region 6 (See Appendix A for more detailed steps)

-10 year	10-Year Timber Management Plan Objectives (to be replaced in FY 1985 by Forest Plan) Sales ideas first generated.
-5 year	5-Year Action Plan A. First time new sales appear. B. Revised annually. C. Coordination of other resources. D. Scheduling for purchaser needs (i.e., sale size, mix, etc.).
-4 year	Environmental Assessment A. Identification of specific issues and concerns. B. Public input.
-3 to -2 year	Sale Preparation and Layout A. Sale layout (logging system requirements, on-the-ground location, silviculture requirements, etc.). B. Sale area boundary posting (including landline location). C. Cruise sale area--estimate volume of sale. D. Collection of other resource site data. E. Road location, survey, design (rights-of-way needs determined).
-1 year	Firm Sale Preparation A. Preparation of road construction specifications. B. Preparation of appraisal report on value of the timber. C. Preparation of prospectus and sales contract.
0 year	Sale Advertised
+30 days	Contract Awarded Bids received, oral auction conducted, contract awarded to high bidder.

+1 year	Mobilization Mobilization period for purchase. A. Usually no logging activity--road construction may start. B. If sale is SBA Set-Aside, road may be opted for Forest Service construction under public works contract.
+2 year	Road Construction Completed
+3 to 4 year	Logging Operations Conducted A. Timber scaled. B. Payments made on scaled timber.
+5 year	Logging and Cleanup Logging completed and purchaser slash work completed. A. Contract terminated. B. Site preparation conducted.
+6 year	Reforestation-Planting of Seedlings
+7 to 10 year	Annual Check of Planted Seedlings

B. Summary of Tree Measurement/Lump Sum Sale--Region 8 (See Appendix B for more detailed steps)

Region 8 forests are basically young, uniform, homogeneous forests. The majority of Region 8 forests were obtained as worn out farmland, or completely cut forests by private industry foresters. This land was largely obtained in the 1930's and was reforested by the Civilian Conservation Corps.

Timber Sales Gate System Region 8

-10 year	10-Year Timber Management Plant Objectives (to be replaced in FY 1985 by Forest Plan) Sales ideas first generated.
-3 year	3-Year Action Plan A. First time new sales appear. B. Revised annually. C. Coordination of other resources. D. Scheduling of purchaser needs (i.e., sale size, species mix, etc.).
-3 to -1 year	Compartment Prescription and Environmental Assessment A. On-the-ground sale layout and design. B. Public input. C. Identification of specific issues and alternatives. D. Road location and design.

-1 year	Marking and Measurement Trees marked and measured.
-6 months	Appraisal of Sale
0 year	Sale Advertised A. 30-day advertising. B. Prospectus provided purchasers. C. "Show me" trips conducted for purchasers.
+30 days	Contracts Awarded A. Sealed bids received. B. Contract awarded to high bidder. C. Pre-entry conference.
+1 year	Road Construction
+2 to 3 year	Logging Operations Prepayment of sale units.
+3 to 4 year	Site Preparation and Reforestation
+5 to 7 year	Annual Checks of Reforestation Success

C. Significant Differences in Region 6 and 8 Timber Sales Procedures

There are three significant areas in which the two diverse methods of sales greatly differ. These three areas discussed below have been the subject of various General Accounting Office (GAO) and Office of Inspector General (OIG) audits, as well as internal FS action plans and published articles.

1. Comparison of Analytical and Transaction Evidence Appraisals (TEA)

The analytical appraisal is used in all regions of the FS, with the exception of Regions 8 and 9, is based on collected data from logging and mill operators associated with FS timber. From this data the FS establishes the mill price for the end product. This end product is usually considered to be 2 by 4's either rough green wood or kiln dried wood.

Another study that impacts on the log value is the overrun studies, which is the difference between volume in the log and actual end product produced. The overrun studies are based on mill studies which were conducted in the mid-1960's. There have been significant technological improvements in lumber and plywood product recovery from logs since then. Also, the peculiarities of the Scribner Log Scale measure (used in scaling the logs), indicates higher overrun as log diameter decreases. It is probable a steadily increasing actual overrun since the mid-1960's has contributed to under appraisals of FS timber.

Operation costs are backed out of the end product price to reflect the value of this "stumpage." Stumpage is the value of the standing timber in the forest. The appraised price or stumpage price is considered by FS as a "spot price" for the timber at that particular date in time. Although FS appraises on this spot price, the purchaser is considering a value of the timber several years in the future and bids according to the length of contract.

The FS believes its appraised value meets the criterion of the Department of Justice's (DOJ) definition of "fair market value," which is the "amount in cash or terms reasonably equivalent to cash for which in all probability the property would be sold by a knowledgeable owner willing but not obligated to sell to a knowledgeable purchaser who desired but is not obligated to buy." However, the FS feels their interpretation of fair market value would not necessarily include the consideration of cash or terms reasonably equivalent to cash. DOJ advised that they feel the contrary.

The DOJ advised, "They [the Forest Service] are not appraising the timber on the terms they are selling it for." Additionally, the terms of the timber sales contract are not consistent with consideration of the value of the timber being sold for cash, since the terms are very favorable to the purchaser, with consideration for payment to be made in the future--sometimes far in the future. FS personnel advised that TEA would not work in Region 6 because the timber industry would resist it if only because of tradition and the loss of opportunity to get a timber sale at the appraised price if there were no competitive bidders. However, when appraising timber for land exchanges, condemnations, and trespasses the FS uses a form of TEA instead of analytical appraisal.

The TEA is generally a system in which the preceding four quarter cumulative sales receipts are used to establish the appraised price. Adjustments in this appraisal system include the implementation of lowering the appraisal by a factor of the previous sales which received no bids. The FS stated they believe the TEA tends to bring the appraised price closer to a "spot price," and in Region 8 the implementation of TEA also resulted in an annual 6 man-year savings in preparation of appraisals.

It is the opinion of some FS personnel, in market areas where there is little or no competition (i.e., Shelton Sustained Yield Unit), the appraisal is a significant factor. In those areas the appraised price is usually the high bid. In an OIG audit report of FS Region 10 appraisal system, dated February 21, 1978, the report stated, "In our opinion, the crux of the Forest Service timber problem in establishing equitable stumpage values in Alaska is the absence of a free, open, and competitive market."

The FS has encouraged those regions using the analytical appraisal system to begin feasibility studies regarding the adaptation of TEA for their own use. Presently, all regions not using the comparable sale approach have begun these studies.

2. Scaling vs. Tree Measurement

Scaling is the method used to measure the actual volume of timber the contractor has taken from the National Forest. It is this volume that the contractor actually pays for. This method is used by all regions with the exception of Regions 8 and 9. The scaling was historically done exclusively by FS personnel until the 1950's when because of budget cuts a third party scaling program was implemented by the FS. Third party scaling companies because of their disproportionate salaries drew many Government scalers away from the FS. Therefore, third party scaling became not just the least expensive way to go, but the only way to go, since the FS did not have the scalers to do the work.

The practice of scaling is largely done for two reasons: (1) Custom among the timber industry; and (2) in old growth timber it is very difficult to accurately measure the waste or defect in timber until it has been cut. The third party scalers are contracted for and paid for by the timber purchaser. The scaling cost is included in the operators cost in the appraisal. The third party scaling companies provide periodic checks or check scaling on their own personnel. These check scaling reports are not usually provided to the FS. The FS also routinely checks the third party scalers for accuracy.

In Region 6 there are at present 49 Government FS scaling positions (20 scalers and 29 check scalers) and, of this number, an estimated 11 check scalers will retire in the next 5 years. Previous vacancy announcements for FS check scaling positions have indicated little interest by FS personnel because of reluctance to relocate, travel, equivalent or lower grade pay scales, and a limited career ladder. The FS has submitted a request to OPM for review of their scaler and check scaler positions for upgrading, but has recently been advised resubmission will be necessary before any action is taken.

The OIG report on FS third party scaling, dated September 23, 1980, stated, "Third party scalers are generally honest, skilled professionals who take pride in the quality of their work, and this survey disclosed no evidence of any third party scaling organization or third party scaling organization employees who were attempting to defraud the government. Nevertheless, the survey disclosed serious weaknesses in Forest Service policies and controls which provided considerable opportunity for fraud to occur."

FS field personnel advised they consider 25 percent of the third party scalers to be incompetent, biased in favor of industry, and that the scaling always seems to favor the timber purchaser, by as much as 1.5 percent of the volume of the sale. Applying this 1.5 percent to the Region 6 annual volume sold of 5.4 BBF at a rate of $215 per thousand board feet results in a potential loss of revenue of about $17 million per year in Region 6 alone.

Tree measurement on the other hand, is a presale measurement system used in Regions 8 and 9, exclusively conducted by FS personnel. The measurement is done during the time the sale area is marked, and each tree to be sold is counted and marked with FS tracer paint. Each tree is measured as to its diameter and height (if the sale was under 100,000 board feet) or a sampling (i.e., 1 in 10 or 1 in 20) of the trees according to diameter are measured. These volumes computed under the tree measurements are a part of the FS contract in Regions 8 and 9, and those volumes along with the bid price are what the purchaser pays for.

The FS advises they intend to move to a total tree measurement system in those areas not presently using it, as soon as the old growth timber is significantly diminished. The FS has had a long term study in process to move to the tree measurement system, as it considers tree measurement volume tables to be much more accurate, and estimates it will be approximately 15-20 years before the FS can move to anything close to a 100 percent tree measurement system. Largely this movement depends upon the rate of removal of old growth timber in the Northwest and will need a gradual phasing in to obtain the forest industry's sanction.

The issues concerning the two aforementioned methods of timber measurement were the subject of a GAO report dated July 16, 1975. The report made recommendations advising feasibility studies concerning the use of tree measurement be conducted, and as mentioned above, these studies are ongoing. It appears no significant changes will be made in the method of measurement for some time to come.

3. Oral vs. Sealed Bidding

For many years the FS sold timber exclusively by sealed bid. This method is generally used today in the East and South. In the West, oral bidding became popular with the timber industry in the 1940's. It was believed then that oral auction generates higher prices than sealed bidding, because the buyer could confront his opposition on the spot. In time oral auctions replaced sealed bidding throughout the West with the exception of the northern region (Montana and northern Idaho), and to a lesser extent in California where both methods are used.

The 1976 National Forest Management Act required sealed bid sales, with exceptions allowed only at the discretion of the Secretary of USDA. Congress eliminated this requirement in March 1978, thereby returning the choice of sales method to the discretion of the Secretary.

In oral auctions, all potential buyers must submit a qualifying bid at no less than the advertised minimum price (appraised price), together with a bid deposit check. After the opening of the bids, the auctioneer declares the contract up for oral bidding.

Those who submitted qualifying bids can raise their offers or wait until no one raises further. Unsuccessful bidders receive their deposits back.

In sealed bidding, each bidder submits one written offer, which he may not change, and a deposit. The highest bidder is awarded the contract. The bid must not be less than the advertised minimum price.

In sealed bidding a buyer who needs the timber is apt to bid the price he judges will win or his maximum price. On the other hand, in oral auctions a bidder has no reason to offer more than the minimum advertised price for the initial sealed bid, and if no one else has submitted a bid, he will get the timber at the advertised minimum. If competition enters the oral auction, the bidder has lost nothing, and can participate in the auction and be successful if he can remain the high bidder until no higher bids are offered. This issue of competition was addressed in an independent study conducted by the University of California, Santa Barbara, dated September 30, 1981, in which the report advised, "If competition for federal timber is reasonably effective then competitive bidding rather than Forest Service appraisals will determine stumpage prices." The report showed some concern in areas such as Region 6's east side, Alaska, and the Shelton Sustained Yield Unit, where competition is minimal or nil. The report stated, "Important public policy issues arise when appraisals are ineffective (appraised values are less than fair market value) and when competition is weak. When these problems coexist, the public does not receive a fair price for its timber."

The lack of competition brings up the question of collusive bidding. A representative of a timber purchaser in Region 6 advised that he had not seen any collusive bidding in the last 16 months, but would not expound on what he had seen.

The General Counsel of USDA advised they report all instances of collusive bidding practices or patterns of noncompetitive bidding to the Attorney General of the United States in accordance with the National Forest Management Act of 1976. However, the attendant problem with prosecution of collusive bidding is the extreme difficulty in providing evidence of a collusion without some documentation and/or direct testimony of one of the participants. The most controversial and widely known instances of collusive bidding deal with a civil suit brought by Reed Brothers Logging Company of southeastern Alaska against Louisiana Pacific and Alaska Pulp and Lumber. Evidence from that civil suit, which contained testimony of employees of the latter two companies and extensive documentation, appears to indicate collusive bidding practices by the latter principals in an effort to keep timber prices down in southeast Alaska and force small competition out of the business and preclude competition. USDA has referred this matter to the Attorney General of the United States, who is presently evaluating this matter to determine if there is cause to indicate collusive bidding with reference to section 7 of the Sherman Act.

General Counsel USDA advised because of the difficulty in obtaining documentation, it is very difficult to ascertain an accurate index of the extensiveness of this problem. They, however, consider this problem to be somewhere between isolated and widespread, and feel the implementation of sealed bidding, especially in market areas containing minimal competition, would help to preclude this matter.

In addition, the aforementioned University of California report concluded sealed bids rather than oral bidding tends to increase competitive performance in areas where competition is weak, and on the other hand where competition is strong, sealed bidding does not seem to appear to generate higher overbids than oral bidding.

VII. RELATED PROGRAMS IN SUPPORT OF TIMBER SALES

The management areas of roads, reforestation, and landlines, are all integral parts of the timber sales planning process. In their own right each possesses attendant planning problems and has an effect on the timber sales process.

A. Roads

To adequately manage and administer the timber sales program, as well as the other resource functions, the essential utilization and management of the FS road system is a necessity.

1. Legislative History of the Forest Transportation System

Subsequent to the passage of the Organic Administration Act of 1897, Congress recognized the need for a transportation system within the National Forest. The Act of March 3, 1899 provided for wagon roads, railroads, and other highways over and across the National Forests. With the move away from custodial care toward active management, the need became even more pronounced. Roads and logging railroads made possible protection of the forests, reforestation, harvest and removal of forest products, and recreational opportunities for the public. Additional funding was made available through the Act of March 4, 1913. In this act, Congress provided for the expenditure of 10 percent of all monies received during the fiscal year, to go to the maintenance of roads and trails within the National Forests located in other states from which the proceeds had been derived. The Multiple Use-Sustained Yield Act-1960 strengthened and broadened the note of management in National Forests.

The National Forest Roads and Trail Act of 1964 authorized the Secretary of Agriculture to construct a system of roads within the National Forests; and the existence of such a system would have the effect of increasing the timber value and other resources contributory to these roads. The road system would enable FS to provide for intensive use, protection, development, and management in these lanes under the principle of multiple use sustained yield. The act also allowed the financing of such roads through appropriated funds and timber purchaser credits. The direct result of the act is the establishment of a timber sale contract provision for construction of roads for the benefits of the timber sale.

The Forest and Rangeland Renewable Resources Planning Act of 1974 requires Congress to appropriate or take necessary action before the FS builds roads and pays for them with timber. The purpose of RPA was for FS to see if they could look at the long range programs and relate appropriations to the long range rather than a year to year proposition. The RPA contains two planning documents which outline the FS program over the next half century. The first, the assessment, delineates long term demands and supplies from the Nation's forest and rangeland, and how best to use these resources. The second, a long range program, is based on the assessment of FS activities, including management of the National Forest system. The first assessment program was developed during 1975 and must be updated every 5 years. The RPA recommended program accompanies the President's budget and is sent to Congress each year and describes the relationship between the fiscal years budget request and the long range program.

The National Forest Management Act of 1976 provides in part that after July 1, 1977, a timber purchaser has the option of building or not building a proposed road with an estimated cost in excess of $20,000. The FS is authorized to use receipts from the timber sale and such additional sums as may be appropriated for the construction of roads.

2. Road System Classification

Intensive forest management requires roads, not only for timber sales, but for other resource management activities as well. In general, two very different types of roads are built in the National Forests, these are system roads and temporary or non-system roads. System roads are the permanent transportation routes needed to meet all resource management and protection objectives on a particular forest. These roads are planned for retention in the FS road system at the close of the timber sale. The locations, specifications, and construction standards for these roads are set up in detail in the timber sale and/or public works contract.

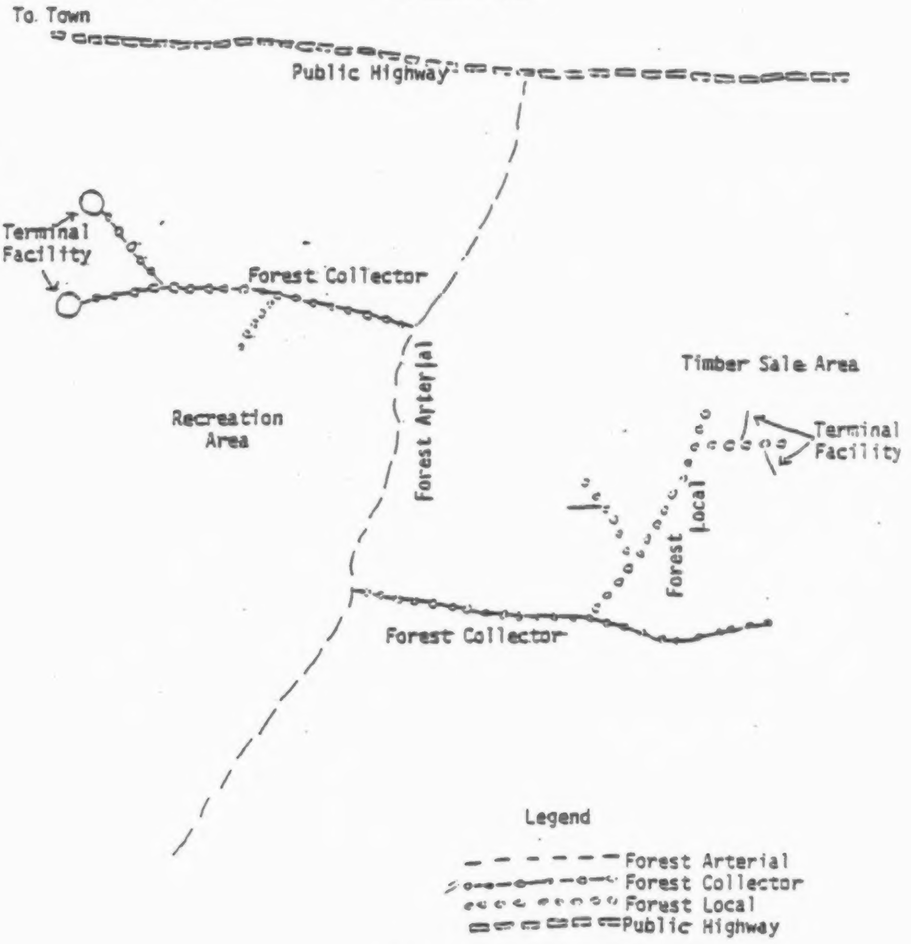
Temporary roads, or roads that have no continuing value to resource management, are built to accomplish essentially a one-time resource management activity, such as hauling timber from a particular part of the timber sale area. These roads are generally referred to in the logging industry as "spur" roads. These roads do not conform to plan system needs and are obliterated on cessation of the one-time use. In the past, some of these roads were not obliterated, and in areas where prevalent public use of these temporary roads was high, the roads were incorporated into the forest road system, either as is or upgraded.

In addition to the above terminology, FS developed in 1973 an additional classification system, which is compatible with Federal Highway Administration and state and local highway departments. Under this new system, a given road can be classified in several ways depending on a subjective opinion of the viewer as to the purpose for which the road was built. The classification system is as follows: (a) Forest arterial roads. These roads provide service to large land areas and usually connect public highways and other forest arterial roads to form an integrated network of primary routes. The location and standard are often determined by demand for maximum mobility and travel efficiency. They are usually developed and operated for long term land resource management purposes and constant use. (b) Forest collector roads. These roads serve a smaller land area and are usually connected to forest arterial or public highways. They collect traffic from forest local roads or terminal facilities, and their location and standard are influenced by long term multiresource needs as well as travel efficiency. Forest collector roads may be operated for either constant or intermittent service. (c) Forest local roads. These roads connect terminal facilities in timber sales areas with the forest collector, forest arterial roads, or public highways. The location and standard of these roads are usually determined by the specific resource activity (i.e., a timber sale) and may be developed and operated for either long or short term service. These are the majority of roads built to support timber sales.

With the exception of some accessing of roadless areas, forest arterial and collector roads have already been established and the preponderance of construction is done on the local road classification.

On the following page is a systematic map which illustrates the relationship of the FS road classification system with public highway system.

Schematic Map


To. Town
Public Highway
Terminal Facility
Forest Collector
Forest Arterial
Recreation Area
Timber Sale Area
Terminal Facility
Forest Local
Forest Collector
Legend
Forest Arterial
Forest Collector
Forest Local
Public Highway

3. Road Costs Dollars and Miles

Road costs are funded through three separate line items; appropriated funds, purchaser credits, and purchaser elect funds. The appropriated funds include engineering planning, location, survey, design, construction engineering, and general administrative costs, as well as direct construction costs. The costs, other than direct construction, go to support the purchaser credit construction and purchaser elect construction. Purchaser credit funds are the crediting of timber sale receipts in lieu of road construction done by the timber purchaser. Purchaser elect funding was brought about in 1977 when the Small Business Administration (SBA) set-aside program came into effect. In the SBA set-aside program, a small timber purchaser may elect to have FS build the road under a public works contract for him, and FS then credits the timber sales receipts for the amount of direct road construction.

The following is a FS distribution of road construction dollars for FY 1981:

DISTRIBUTION OF ROAD CONSTRUCTION DOLLARS IN FY 1981

Note: All values are estimated and should only be used as approximations.

Purchaser Credit-------------	$220,000,000
Purchaser Election-----------	40,000,000
Forest Roads and Trails------	230,000,000
Total----------------------	$490,000,000

The distribution of the $490,000,000 for engineering, construction, and overhead was as follows:

Expenditure		Percent of Total
Engineering	($ 50,000,000)-------	10
Construction	($300,000,000)-------	60
Overhead	($140,000,000)-------	30
	$490,000,000	100

At present there are 276,000 miles of existing roads in the FS system. In the past 6 years the FS has been constructing and reconstructing about 10,000 miles of road annually. The following chart delineates the annual construction/reconstruction and dollars expended by appropriated, purchaser credit, and purchaser election funds from FY 1976-81.

MILES OF ROADS CONSTRUCTED/RECONSTRUCTED AND DOLLARS EXPENDED

USDA/FOREST SERVICE

Fiscal Year	Appropriated FUNDS - C&LA* miles ($M)	Purchaser Credit miles ($M)	Purchaser Election miles ($M)
1976	288.9 (167,626)	8,609.5 (164,500.2)	**
Transition Quarter	98.3 (59,424)	1,559.1 (30,738.6)	**
1977	1,020 (180,769)	8,572 (158,626)	**
1978	793 (180,281)	9,118 (162,459)	641 (10,960)
1979	820 (194,796)	8,863 (217,815)	1,179 (25,398)
1980	923.3 (221,736)	8,020.5 (201,656)	1,541 (54,219)
1981	1,217.6 (240,595)	7,345 (201,893)	1,490.3 (46,217)

*Construction and Land Acquisition
**Purchaser election did not start until FY 1979.

4. Estimates vs. Costs

Accuracy of the FS engineers' estimates for road construction is open to question. These estimates directly affect road construction through appropriated funding, and also purchaser credit. Utilizing the statistics on the SBA road option from FY 1977-81, it was noted the engineers estimate was overstated an average of 9.7 percent. However, historically from FY 1977-80 these estimates were understated some by as much as 48 percent. The FY 1980-81 engineers' estimates tended to be overstated, some as much as 32 percent. These variances are indicative of the economic changes of those time periods. The FS admits that the difficulty in cost estimating is the lag period required to obtain cost data. The FS has made attempts to update the cost data continually, but the rapid economic fluctuation has made this difficult to accomplish. The FS advised that, by March 1982, they will have a draft of a national cost guide to be used for estimating purposes. The single dominant factor in the updated cost data will be the differential between the Davis Bacon Wage rates and the local construction rates.

The FS rule of thumb is that it needs to construct or reconstruct 1 mile of road for every million board foot of timber sold. Analysis indicates that the FS expends about $36,000 to construct 1 mile of road and that for each thousand board feet of timber sold, about $36.65 of the cost is attributed to road costs.

5. Attempts to Reduce Road Costs

The FS has implemented a value engineering program. This is an attempt to remove much of the "goldplating" inherent in road construction costs. Implementation of this program has been done through instruction given at regional forester and director meetings, revision to the Forest Service Handbook, and revision to the Transportation Engineering Handbook. Through these actions, the FS advises it has recently made progress in eliminating unnecessary road construction costs.

6. Road Construction/Reconstruction Impacts on Timber Sales

One of the criticisms of the FS roads is that they are built more to support resource activities than to the standards necessary to support a timber sale. The FS contends their road standards are appropriate considering safety, cost of transportation, and impacts on the land and resources. The FS believes that more consideration should be considered to future reconstruction and road maintenance costs. If road construction standards are lowered in the initial construction, it is only deferring the cost to a later date when reconstruction or maintenance will have to be done at a much higher cost. In other words, either pay now or pay later.

In considering the length of a timber sales contract, one of the largest factors is the length of time given for road construction. Road construction usually takes one or two operating seasons to complete. However, road construction delays and extensions are not uncommon for a variety of reasons. To exemplify this, of those roads that were opted for FS construction under the SBA road option program from FY 1977-81, 337 roads were completed, of which 24 were completed late. Some of those delays were as much as 1,028 days. These delays in length of construction is largely attributed to the speculation indulged in by contractors at the time of timber purchases.

One of the alternatives the FS has looked into is the economies of preroading or advanced road construction. In a study on preroading, concluded by the FS in 1967, some of the benefits of preroading or advance road construction identified and still applicable today include: (1) Increased opportunities of timber harvest. (2) Savings in administrative cost. Several timber sales may go on concurrently in the same general area thus minimizing the administrative cost and delays on those sales until road construction on the first initial area is completed. (3) Increased employment and community income for timber operations. (4) Reduced cost of road construction. The total cost to the Government is generally substantially less than the cost of the incremental purchaser construction, plus the subsequent Government reconstruction at a later date. (5) Increased stumpage prices. Preroading will result in higher bids for the timber, since there is less risk involved to the purchaser, partly because buyers are relieved of the uncertainties of road construction and partly because the opportunity to harvest timber promptly tends to minimize the risk of changes in the market. (6) Increased safety. (7) Increased benefits to nontimber users--advanced roading would increase the supply of hunting and other recreational activities and thus add to the benefits provided by the National Forest.

However, it is realized that capital requirements for roads are enormous, and the engineering manpower requirements would have to be drastically increased. Also, the present interest rates are such that it may be economically infeasible for the Government to borrow against the standing timber, as collateral, to do the advance roading.

On the other hand, the opportunity to put people back to work during this present economic recession in coordination with the ability to have timber sales readily available when the economic upturn begins to meet the demand for timber, may offset negative cost factors if preroading is utilized with anticipated future short term demand.

B. Reforestation

With the passage of the Knutson-Vandenberg Act of 1930, the first authorized appropriation of funds for reforestation, and the subsequent collection of funds from the timber purchasers for reforestation, was established. Later, the passage of the Sustained Yield Act in 1960, the Forest Rangeland Renewable Resources Planning Act of 1974, and the National Forest Management Act of 1976 developed and defined the responsibility of the FS to provide the Nation a continual source of timber for perpetuity through appropriated funds and the retention of a portion of the timber sales receipts for the purposes of reforestation and timber stand improvement.

There is at present a backlog of 575,000 acres, which have been unreforested since 1975. The following schedule is a tentative update of the FS's attempt to reduce this unreforested acreage by the start of FY 1986.

REFORESTATION PROGRAM NEEDS FOR FISCAL YEARS 1981-85
(acres in thousands and dollars in millions)

	Backlog (acres)	Current or Anticipated (acres)	Total (acres)	Annual Program Appropriated Funds (acres)	Annual Program Appropriated Funds (dollars)
10/1/80 Balance-----	575	775	1,350		
FY 1981					
New Needs---------	-	+375	+375 1/		
Adjustments-------	-88	- 0	-88 2/		
Accomplishments---	-74	-346	-420	218	61.9 4/
10/1/81 Balance-----	413	804	1,217		
FY 1982					
New Needs---------	-	+396	+396		
Accomplishments---	-62	-311	-373	206 3/	72.4 5/
10/1/82 Balance-----	351	889	1,240		
FY 1983					
New Needs---------	-	+400	+400		
Accomplishments---	-66	-338	-404	190	76.0
10/1/83 Balance-----	285	951	1,236		
FY 1984					
New Needs---------	-	+400	+400		
Accomplishments---	-70	-381	-451	210	84.0
10/1/84 Balance-----	215	970	1,185		
FY 1985					
New Needs---------	-	+400	+400		
Accomplishments---	-12	-448	-460	216	86.4
10/1/85 Balance	203	922.	1,125		

1/ New needs are the results of timber harvests, regeneration failures, and natural disasters such as fires, storms, insects, and diseases.

2/ The adjustments include acres regenerated through natural stocking and reduction by management decision (land classification, multiple use, and land use decisions).

3/ Includes the Tongass National Forest acres but not dollars.

4/ Average cost of $300/acre.

5/ Average cost of $344/acre.

Of the projected 203,000 acres backlog in need of reforestation by FY 1985, the large majority (91,000 acres) are located in Montana. The FS advised the Montana acreage was burned out in 1910, and it is uneconomical to be reforested because of inaccessibility. It is predominantly in a roadless area, therefore, although some natural regeneration has occurred in all likelihood it would be uneconomical to reforest this area because of the cost of present technology and funding requirements. An additional 28,275 acres in Region 4 and 32,964 acres in Region 6 will remain in the 203,000 acres backlog until FY 1986.

Reforestation Gate System (Plan)

The actual planting of the trees can only be accomplished after the completion of the timber harvest and the control of the sale area is returned to the Forest Service. Planning must begin 4 to 5 years in advance of the anticipated completion of the sale. The following is the sequential planning steps which occur in the reforestation process:

(1) Five years prior to planting the collection of seed is started, which is sorted and classified according to species and seed zone (seed zones are defined as similar areas of latitute, elevation, and climate, with regard to species which provide the most genetically viable and productive stock).

(2) The next year the seed is sown with regard to anticipated needs. Growing seedlings to their most viable size for planting varies from region to region. Region 6 seedlings usually take 2 years, and Region 8 seedlings take about 1 year. Oversowing is done to compensate for attrition due to uncontrollable environmental impacts on the growing cycle.

(3) The next year is allocated to advance site preparation as the seedlings are growing. This is the preparation of the land for planting. This is necessary a year in advance in many regions like Region 6, where the planting season is limited and to have the time to prepare the soil for planting. Delay in planting may cause additional site preparation work, adding to the reforestation cost. Site preparation and planting is controlled by the time of year the purchaser completes his contract.

(4) This is the year that the planting must occur. Seedlings to be successful must be planted at a certain period of maturation. A delay in planting results in waiting for a new cycle of seedlings from the nursery, and the possible destruction of surplus seedlings.

Reforestation Problems

Since the scheduling and planning for reforestation must occur several years in advance, any deviation from the approved plan causes problems. Some of the factors impacting on the plan include harvesting delays and difficulties with weather, fire, and insects. In view of these and other problems, planning is tentative, and scheduling of reforestation is oftentimes an educated guess.

Even after the seedlings have been planted problems still occur. For example, in Mississippi a dry hot wind blew for several days just after several acres of seedlings were planted. All the seedlings died. In FY 1981 the FS lost about 52,000 acres of seedlings due to similar mishaps. For those 52,000 acres, preparation work and plantings must be started and completed again.

The coordination of the respective schedules of the FS and nurseries is a key factor in the successful reforestation effort. The following is a seedling request flow chart showing the steps that must be taken to produce a 2-year-old seedling in the Forest Service nursery for planting in the spring of 1984.

SEEDLING GROWING CHART
(2-year-old seedling from Forest Service Nursery)

Fall 1981 -----------	Nursery sowing schedule set up on projections of the forests
Winter-Spring 1982 --	Seed sown
August 1982 ---------	1st Year inventory
August 1983 ---------	2nd Year inventory
September 1983 ------	Tentative tree allocation request from Ranger District
October 1983 --------	Tentative excess list
December 1983 -------	Final tree allocation request
January 1984 --------	Firm excess list
April 1984 ----------	Trees shipped to districts

A possible criticism of the FS is its practice of destroying seedlings. In FY 1980 the FS ground root nurseries produced 151,259,000 trees of which 5 percent or 7,522,000 were destroyed. Some of this surplus is attributable to intentional overproduction to insure the amount of trees requested is available. Another reason for the surplus is the very small seed zones utilized in the Northwest. Because of the seed zones, it is sometimes infeasible to sell surplus seedlings to the general public. Indiscriminate sales could result in genetically inferior planting and yields, with a detrimental effect on future productivity.

The FS follows the philosophy that raising surplus seedlings is a necessary cost of doing business, and it is much more economical to overgrow in nurseries, than to not have enough trees for planting in the proper year and seed zone. An example of the criticality of the scheduling with regard to time and seed zones is the following 1982 seedling inventory request and allocation from the Bear Springs Ranger District in the Mount Hood National Forest.

1982 SEEDLING INVENTORY, REQUEST, AND ALLOCATION
(thousands)

Seedling Code	Requested Production	Nursery Production	District Needs	Surplus
WWP 452 3.5	7	4	4	--
WWP 452 4.0	10.7	10.8	10.8	--
DF 662 3.5	100	133	20	113
WWP 662 3.5	35	8	8	--
PP 662 3.5	62	57	57	--
	214.7	212.8	99.8	113

SURPLUS SEEDLING EXPLANATION

Sale	# Seedling	Disposition
Fungi	15	Biomass Removal Contact Not Complete
Clackamas Super	5	T.S. Contract To Be Extended
Backdoor	5	T.S. Contract To Be Extended
Mr. Ed	55	T.S. Contract To Be Extended
	80M	

Status of Surplus Seeding		Estimated Cost to Destroy*
District Surplus----	80	@ $125 M = $10,000
Nursery Surplus-----	33	@ $125 M = $ 4,125
	113M	

---

* Seedlings will be offered to other agencies and the public, and if picked up no charge is made to District or Nursery. If no requests received, trees will be destroyed and charged to District (project funds) or Nursery (working capital funds). Either way District project pays either immediately or in the future via increased nursery operation costs which is the basis of establishing costs of seedlings.

It is noted that of the 80,000 surplus seedlings attributed to the district surplus, 65,000 of these seedlings could not be planted due to the extension of timber sales contracts.

In spite of the aforementioned problems, the FS in recent years has generally met or exceeded their goals. This has been accomplished by the augmentation of natural regeneration, container seedling stock (hot house grown seedlings), and in the adoption of sound business practices, such as taking advantage of the present depressed labor market.

C. Landlines

Landlines can best be described as the boundary or property line, established through land survey, between a National Forest and privately owned land. Although the landlines were surveyed in the 1800's when the National Forests were established, much of them have been obscured or obliterated through time and environmental changes. Also when many of the National Forests were established, many did not contain contiguous boundaries, therefore, in an effort to consolidate National Forest system lands, the FS acquires and exchanges lands to improve the administration and management of both public and private lands. The exchange of isolated tracts of Forest Service land and the acquisition of available, desirable private tracts results in substantial savings in administrative costs for the private land owners and the Forest Service. Savings are obtained by reducing the 272,000 miles of property landlines bordering about 3 million private landowners, reducing the number of property corners to be maintained and by reducing the potential for additional occupancy trespasses. A FY 1980 chart showing the miles of landlines by region and a summary of land acquisitions and exchanges appears below.

Miles of landline location by Region—fiscal year 1980

Region	Total Boundary	1980 Target	1980 Accomplishment	Done to date
1	30,664	351	421.0	2,195.0
2	51,433	216	201.2	1,317.2
3	19,199	367	490.0	3,315.0
4	28,659	289	286.7	1,909.7
5	29,577	1,670	1,043.0	2,977.0
6	25,726	1,264	1,093.3	3,954.3
8	42,280	1,716	1,716.0	29,564.0
9	42,642	350	432.8	2,378.8
10	1,536	52	68.8	276.8
Totals	271,716	6,275	5,752.8	47,887.8

Land acquisition and exchange

	Acres (number)	Cases (number)	Value
Purchase[1]	62,857	334	$ 59,666,696
Exchange[2]	75,828	141	$ 61,601,951
Donation[1]	2,206	20	$ 909,358
Special studies[3]	183,200	8	$ 90,000,000

[1] Acres acquired.
[2] Acres offered-approved.
[3] Made for land transfers, interchanges, boundary modifications.

The Resource Planning Act 1980 Update with regard to landline location indicates, the most optimistic level of the program would be sufficient to support levels of resource output and to discourage new trespass and to resolve current cases. At the lowest level of the program, landline locations would be held at a minimum level used just for low level resource outputs. The landline location backlog, 114,000 miles, would be eliminated by the year 2000 under either program.

FOREST SERVICE SCHEDULE FOR REDUCING THE LANDLINE LOCATION BACKLOG

Period	Backlog at start of period	Total scheduled for period	Average per year
	(miles)		
1981-85	114,000	15,595	3,119
1986-90	98,405	40,350	8,070
1990-2000	58,055	58,055	5,805
2000-	0	0	0

Landline Problems Attendant To Timber Sales

The Forest Service Manual No. 7150 advised FS policy is as follows: Property lines will be marked and posted to Forest Service Manual Standards as part of any management activity. Any management activity near or adjacent to a property line which creates a false or misleading boundary line is not acceptabale. "False" boundary lines come into existence by utilizing old use lines, fences, timber cutting lines, setback lines, timber cutting line agreements, etc. All management practices occurring near or adjacent to National Forest boundaries must comply to the true property lines.

Since FY 1977 there has been a marked decrease in funding for landlines. Since the first priority of landlines is the support of the timber sales program, many times it has been necessary to delay a timber sale requiring landline support and swap it for one not requiring it. Presently, Region 6 is rapidly running out of the availability of this option, and this will amount to a disproportionate share of the timber sales in the next 10-15 years requiring landline support. An example of this is in FY 1984 the Detroit Ranger District of the Willamette National Forest will have 12 out of its 26 sales requiring landline support. Because surveying has to be done several years in advance, the FY 1982 and FY 1983 budgets for landlines will be used to support these FY 1984 sales. If there is a budgetary shortfall, there are three options that may be used out of necessity: (1) Back off from the questionable line, which causes a loss in timber sales, and is contrary to FS policy as mentioned above; (2) do not put the sale up for offer, which is unrealistic; and (3) determine an informal cutting line agreement with the private party, which is again contrary to FS policy. Although options 1 and 3 are contrary to FS policy, necessity may require the utilization of these options. The following gate system is an example of the long range planning necessary in landline support:

Landline Gate System

(1) Year 10-8 in the timber management planning process is long range planning in which the review of planned sales area is to identify those areas needing surveys in potential problem areas.

(2) Year 7 the coordination, cooperation and cost estimates are established. This time frame is provided to accomplish and coordinate contacting the adjoining landowners to acquire permission for access, survey, and marking of the property line to Forest Service standards, as well as exploring the possibility of developing cooperative agreements with adjacent landowners to share the cost of survey.

(3) Year 6 in which preparation of the necessary advent forms for funding the survey in year 3 is made.

(4) Year 4 preparation of the cadastral survey contract to be advertised in year 3.

(5) Year 3 survey accomplished and property line marked.

(6) Year 2 and 1 steps taken to protect land corners and property lines as prescribed in the clause B6.23 of the timber sale contract, prior to the sale the next year.

VIII. SPECULATIVE BIDDING--ITS IMPACT ON GOVERNMENT AND INDUSTRY

Because of the lenient terms of the FS timber sales, speculative bidding has increased the overbid for timber by as much as 500 percent. This speculation makes the timber uneconomical to harvest in todays economic climate and has caused severe financial hardships to the timber industry.

Problems caused by speculation for FS timber is a cyclical happening. The 1981-82 scenario was repeated in 1975 and 1956. For example in a 1974 FS document entitled "Timber Sale Policies and Procedures In a Depressed Economy" stated in part:

> "Since spring of 1974, wholesale prices for lumber and plywood have plummeted from record high levels. Faced with a lack of demand for their products, many purchasers of National Forest timber have had to reduce their production; some have had to shutdown. With reduced capital flows, many are finding it difficult to make payments on such timber as they continue to harvest and in some cases to build roads needed for future harvests (under existing contracts). Others say they cannot make extension deposits required as a condition of contract extension for any sale advertised after June 30, 1971. A few contend they cannot bid on new timber offerings because they cannot furnish the necessary bid guarantee.
>
> "With no immediate prospects for a significant increase in housing starts (the primary source of demand for lumber and plywood) there is widespread and understandable concern on the part of many purchasers as to their ability to survive the present crisis. Purchasers and others have suggested various measures to provide relief for purchasers of National Forest timber."

Corrective actions considered then and now include contract extensions, terminations, etc. In fact, in December 1981, bids were being received four to five times higher than the appraised value while at the same time the contractors could not harvest the timber already under contract. The prevailing attitude of wanting more when one cannot handle what one already has continued to occur.

A. Causes of Speculation

As has previously been pointed out, the FS appraisals are based on history, and bid prices for timber are essentially future prices. The FS officials repeatedly advised that the bidders are "betting on the come" that inflation will continue in the future.

The FS allows bidders to compete in an attempt to profit from expected price changes. Region 6 sale contracts permit bidders to bid in anticipation of price increase. The bidder/purchasers buy now and pay later in a market which is lined with uncertainties because of the volatility of timber prices and lumber price indices. Because of the high overbids experienced by FS sales, timber harvests are delayed to enable inflation, or hoped for increases in demand, to force market prices above the level of bid prices.

FS appraised values have continued to be dwarfed by high bid awards. Appraisals do not reflect the market value of FS timber because that value is not determined until some future date when the purchaser actually cuts the timber for market. The following schedule shows the high overbid ratio from January 1979 to August 1981 for West Side Region 6 timber.

Table 9. Advertised and Bid Prices for All Species on the West Side of Region 6

	Washington				Oregon				Washington and Oregon		
Year	Volume	Adver. Value	Sale Price	Bid Ratio	Volume	Adver. Value	Sale Price	Bid Ratio	Volume	Adver. Value	Sale Price
1979											
Jan	110.0	$94.38	$190.50	2.01	165.1	$114.43	$273.68	2.39	275.2	$106.41	$240.42
Feb	53.5	94.72	195.97	2.07	135.1	122.94	321.00	2.61	188.6	114.94	285.52
Mar	220.7	97.41	183.06	1.88	555.7	120.21	299.56	2.49	776.4	113.73	266.44
Apr	40.3	81.21	159.01	1.96	70.0	107.83	271.10	2.51	110.3	98.10	230.12
May	90.9	98.71	216.59	2.19	129.3	107.10	269.12	2.51	220.2	103.64	247.44
Jun	75.7	68.40	155.13	2.27	232.9	124.06	337.61	2.72	308.6	110.41	292.84
Jul	69.0	109.14	293.75	2.69	150.0	121.47	351.89	2.90	219.0	117.59	333.57
Aug	96.1	108.81	198.60	1.82	249.8	96.58	349.09	3.61	345.9	99.96	307.27
Sep	374.0	76.36	282.22	3.70	520.6	113.20	387.56	3.42	894.6	97.80	343.52
Oct	26.3	126.94	313.47	2.47	25.1	122.71	399.46	3.25	51.4	124.87	355.45
Nov	4.4	131.44	210.09	1.60	25.9	114.63	399.23	3.48	30.3	117.41	372.04
Dec	33.4	85.77	248.89	2.90	114.6	105.94	390.84	3.69	148.0	101.39	358.82
1980											
Jan	38.8	120.72	260.46	2.16	177.5	114.27	364.03	3.19	216.3	115.43	345.44
Feb	79.6	92.32	178.66	1.94	264.4	103.16	392.21	3.80	344.1	100.65	342.84
Mar	120.0	65.58	229.27	3.50	480.9	93.10	391.56	4.21	600.9	87.61	359.15
Apr	111.8	84.88	242.49	2.86	70.7	73.02	275.52	3.77	182.5	80.28	255.29
May	68.3	84.28	224.99	2.67	104.6	90.59	350.10	3.86	172.8	88.09	300.67
Jun	69.5	38.65	78.37	2.03	112.2	100.56	326.83	3.25	181.7	76.89	231.84
Jul	49.8	98.54	312.22	3.17	175.2	72.58	356.27	4.91	225.0	78.32	346.52
Aug	31.9	2.50	22.17	8.87	97.9	49.09	381.71	7.78	129.8	37.62	293.27
Sept	18.9	45.73	110.14	2.41	179.6	43.15	248.41	5.76	198.5	43.41	235.23
Oct	22.9	17.00	103.55	6.09	7.3	56.51	138.06	2.41	30.2	29.88	111.42
Nov	35.7	69.31	224.49	3.24	37.9	93.29	396.92	4.25	73.6	81.65	313.25
Dec	25.1	46.65	122.64	2.63	200.2	107.47	361.71	3.34	225.3	101.41	335.11
1981											
Jan	57.20	44.11	168.33	3.82	122.0	95.63	333.96	3.49	127.8	93.30	326.65
Feb	14.44	69.84	406.85	5.83	62.0	67.63	328.97	4.86	76.5	68.04	343.68
Mar	20.13	52.59	60.30	1.15	101.2	60.68	312.27	5.15	121.4	59.35	270.48
Apr	17.6	57.71	159.34	2.76	102.3	99.10	336.34	3.39	119.9	93.03	310.42
May	34.8	65.23	198.85	3.05	60.9	121.24	279.82	2.31	95.7	100.90	250.41
Jun	59.6	46.94	197.62	4.21	83.6	107.91	269.60	2.50	143.5	82.49	239.59
Jul	87.2	81.98	169.25	2.06	87.2	63.13	246.96	3.91	174.4	72.55	208.11
Aug	180.3	66.40	264.96	3.99	158.5	63.49	310.85	4.90	338.8	65.05	286.43

Note: Volume is in millions of board feet. Advertised value and sale price are weighted averages per thousand board feet.
Source: U.S. Forest Service.

Many theories have been offered to explain the vast differences between appraisal and bids, some of which are:

(a) Operator of average efficiency. FS appraisals are based on averages. Almost all contractors believe--correctly or incorrectly--that they are more efficient than the average in selling, milling, or logging. Their bids reflect their belief that they can beat the averages. If for example average costs are about $200 per thousand board feet, a bidder with costs 20 percent below average could have a $40 MBF in cost advantage. The same theory would apply to selling price if the bidder is above average he would have an advantage.

(b) Dollar averaging with other stumpage. If a buyer has (1) some private timber or (2) other purchases at lower stumpage prices, he can pay more for additional timber and still average out. An example of low price timber would be the Shelton Unit and Mount St. Helens salvage sales. For example, if a buyer has 75 percent of next year's timber already purchased at $100 MBF and he needs to average $150 MBF to make a reasonable profit, he can bid $300 MBF on the remaining 25 percent of his supply, and his average will be $150.

(c) Capital gains. By establishing a high price on a portion of his timber supply, he can establish substantial capital gains on the lower cost portion of his supply as in the above example where the tax advantage could be as much as 50 percent of $200 MBF on 75 percent of his timber as $75 per MBF overall.

(d) Profit and risk. The reasonable margin for interest, profit, and risk in appraisals is about 13 percent of selling (i.e., 13 percent multiplied by $400) or about $52 per MBF. The bidder may decide to forgo the $40 of the $52 in order to get the bid.

(e) Inflation. Events have shown that every 4 to 5 years high interest rates cause a recession to occur in housing markets and in timber prices. Nevertheless, home values and timber products prices have inflated at a much more rapid rate than the rest of the economy. While "double digit" inflation in the U.S. economy as a whole has occurred only sporadically, it has been much more prevalent in the lumber and timber sector. Stumpage prices in the Pacific Northwest have averaged between a 16 and 17 percent inflation rate over the past 13 years. A mill in severe need for timber can gamble that the trend will continue. The "gamble" could approximate use of these numbers: If Douglas fir stumpage is appraised at $150 per MBF and he plans to cut it 2 years hence, he can overbid the appraisal by, say, 33 percent or $50 per MBF.

(f) Shortages. In the Northwest timber is becoming somewhat in short supply and to insure the contractor has an inventory of timber, he bids on timber to be delivered 3 to 5 years hence. The contractor by having the FS contract also is in a position to "borrow" funds on the FS contract.

(g) Cost to hold. The FS requires little or no up front money to hold the sale. For example, the following schedule shows what the annual purchaser's cost is to hold timber valued at about $60 million.

WILLAMETTE NATIONAL FOREST
TIMBER SALES SOLD DURING SEPTEMBER 1981

Total Number of Sales-----------	31
Total Volume--------------------	215,286 MBF
Total Advertised Value----------	$20,179,550
Total Required Bid Guarantee----	$628,000
Total Bid Value-----------------	$60,129,570

The FS advised three different bonding agents were questioned locally, and they stated that they do not charge their customers for writing timber sale bid bonds. Performance and payment bonds cost timber purchasers anywhere from $12.50 per thousand dollars, downward. They are charged a percentage of their net worth; i.e., a client worth $17 million could pay as little as $1.75 per thousand for a performance bond.

Therefore, the most it would cost to tie up this $60,129,570 worth of material would be $7,850 a year.

Also an independent study noted, among other items, that:

> "An important explanation of observed high overbids, especially under higher rates of inflation during the decade of the 1970's, is the fact that bid prices for National Forest timber are essentially futures prices. Bids for National Forest timber are submitted in the present, but payments are not made until the timber is harvested in the future and revenues follow even later when the timber products are sold. Therefore, payments to the Forest Service are made in inflated cheaper dollars. If bidders anticipate inflation, then stumpage values increase with the term of the sale. Where timber sale contracts provide for price escalation (as on the Eastside) part of the gains in stumpage value may be lost to the timber purchaser.
>
> "To compound the problem further, Forest Service appraisals are based on estimated prices and costs which existed from one to six months prior to the sale date. Thus (1) the longer the appraisal lag, (2) the longer the duration of the sale, and (3) the higher the expected rate of inflation, the greater

will be the observed overbids. In a series of interviews with potential bidders, they were asked which sale attribute influenced their bid prices most. In response, 31 out of 45 replied that "length of the timber sale contract was the dominant factor.

"The Westside bidding record shows tht bidders were willing to pay an additional $8.50/MBF more for a 60 month compared to the average 31.2 month contract, and Eastside bidders about $2.75/MBF more than for an average 34.9 month contract (1967 dollars). The introduction of price and cost expectation variables into the model specifications established that for every additional dollar of anticipated increases in product revenues, overbids increased by 10 cents."

B. What the FS Plans To Do

The FS has recognized the adverse impact of speculative bidding, i.e., mill closings, high unemployment, potential bankruptcies, and a significant reduction in stumpage receipts of the Federal and county governments. To alleviate some of the impact the FS on October 15, 1981, extended most existing timber sale contracts by 2 years. It also gave consideration to termination of some contracts. This action is still under study.

The major thrust of the FS proposal was announced in October 1981. After reviewing the industry's and interested parties' comments, FS on January 15, 1982, issued the following proposed changes:

(1) A 5 percent bid deposit will be made.

(2) Costs equal to 5 percent of the award will be deposited when the contract is signed.

(3) Performance bond will be raised to $500,000.

(4) Prior to bidding, those who wish to bid must prove they can qualify.

(5) After a default, the bidder must reestablish performance qualifications.

(6) The contractor at midpoint in the contract will be required to have made a certain amount of payment.

(7) Annual monthly payments during the last year of the contract will be required.

(8) A discount will be given for early harvesting.

(9) Stumpage rate adjustments will be provided Western Oregon and Washington contracts awarded after March 31, 1983.

(10) Additional charges will be levied for extension of contracts.

(11) Additional penalties will be levied on defaulted contracts.

In addition to the proposed changes in timber sale procedures, the FS advised that the volume of the average sale will be reduced and thereby reducing the length of the contract. Regional foresters will issue guidelines and monitor sale size and length.

Also, the FS will continue to monitor the timber sale program to determine the effects of the new procedures. Conditions will be evaluated as of April 6, 1983, and April 1, 1984. If additional policy changes are needed they will be adopted. Future considerations will also be given to (a) increasing the cash deposit required at time of contract award, (b) increasing the percentage of payment required at contract midpoint, (c) holding some cash until final harvest, and (d) adoption of a market related contract term adjustment provision.

* * * * *

APPENDIX A
Page 1

Explanation of Gate System--Region 6

-10 year Timber Management Plan

Under the Timber Management Plan this is the first time sales ideas are generated. These sales ideas are general in nature and are first initiated into the actual sales program when placed in the 5-Year Action Plan.

-5 year 5-Year Action Plan

Under the 5-Year Action Plan, 5 years before the proposed sale is the first time the new sales area will appear. This action plan is revised annually, with sales shifted in time sequence to adjust for programmed selling goals. Also, during this time frame, coordination with other resource planners and consideration for scheduling regarding purchasers' needs, such as the size of the sale, species mix, and market demand.

-4 year Environmental Assessment

During this time frame the Environmental Assessment is produced by a process of addressing issues and concerns pertinent to the project and enclosed refinement of criteria which guides data collection, analysis, evaluation, and alternative preparation under the NEPA process.

-3 to 2 year Sale Preparation and Layout

During this 2-year time frame the actual on-the-ground work is conducted to establish the necessary logging systems, silviculture requirements, the posting of the sale area boundary, including possible survey work necessary to establish the landline location (property line). The sale area is "cruised," which is a random sampling of trees to estimate the volume of timber in the sale area. Collection of other resource data is done at this time, and the road location, survey, and design is completed. In the road location, consideration is given to a transportation plan, which may necessitate obtaining right-of-way permission.

-1 year Firm Sale Preparation

During this last year prior to the sale advertisement, the appraised value of the timber is prepared from the computed volume from the cruise, and the prospectus and sales contract are prepared. Road construction specifications are prepared with estimates of construction costs to be utilized as purchaser credit in the sale contract or if the purchaser elects to have the FS build the road for him, the specifications and estimates would be utilized in the obtainment of a public works contract.

0 year Sale Advertised

After the above planning and preparation has been conducted, the proposed sale is advertised usually for a 30-day period. The advertisement offers prospective bidders an opportunity to review the sale propectus, which contains the cruised volume and appraised value of the timber, as well as other pertinent information including road construction information. The following is an example of a timber sale prospectus.

TIMBER SALE PROSPECTUS

WILLAME DEER	Gifford Pinchot National Forest
Timber Sale Name	

Unit or Compartment	Working Circle	District
4503, 4505	Gifford Pinchot	Packwood

INTRODUCTION. This prospectus is to furnish sufficient information in addition to that contained in the published advertisement to enable prospective bidders to decide whether further investigation of the sale is warranted. INFORMATION GIVEN HERE OR OTHERWISE PROVIDED IS NOT A PART OF THE CONTRACT UNLESS STATED THEREIN, DETAILED CONDITIONS OF SALE ARE CONTAINED IN THE SAMPLE TIMBER SALE CONTRACT. IN THE EVENT A CONTRADICTION EXISTS BETWEEN THIS PROSPECTUS AND THE SAMPLE CONTRACT, THE CONTRACT GOVERNS. Timber Sale Contract, Form 2400-6, will be used. Sale area and sample contract should be inspected before submitting a bid. The appraisal, and other information on the timber, conditions of the sale and bidding may be obtained at Forest Service offices named in the attached advertisement.

BIDDING. Sealed bids will be received at the Forest Service offices named in the advertisement followed immediately by oral bidding. Bids must be submitted on prepared forms which may be obtained from the Forest Service offices named in the advertisement. These forms include instructions for both sealed and oral auction bids as well as for submission of the bid guarantee.

LOCATION AND AREA. Refer to the attached sale area map and to the sample contract for legal subdivisions and location of cutting areas, acreage of sale, acreages to be cut, etc. THE FOLLOWING GENERAL LOCATION, ROUTES OF ACCESS, ACREAGES, AND OTHER SPECIAL LOCATION DATA DO NOT SUPERSEDE SALE AREA MAP OR SAMPLE CONTRACT.

This sale is located in the Willame Creek Drainage, approximately 3 air miles west of Packwood, Washington. This sale consists of 2 Clearcutting Units and 5 partial cut units totaling 121 acres. It is accessible from State Highway U.S. 12 via Forest Service Roads 5200, 4700, 4715 and 4710.

VOLUME AND DESCRIPTION OF TIMBER. The quality, size, and age class of the timber are estimates based on detailed cruise information on file and available for inspection at the Forest Service offices listed in the advertisement. INFORMATION LISTED HEREIN IS MADE AVAILABLE WITH THE UNDERSTANDING THAT VALUES SHOWN ARE NOT ESTIMATES OF A PURCHASER'S OWN RECOVERY AND ARE NOT A PART OF THE TIMBER SALE CONTRACT. For these reasons, bidders are urged to examine the timber sale area and make their own recovery estimates. Volume estimate of included timber has been processed by a new cruise program to specified top diameter limits.

Forest Service field estimate of sale volume and log quality in percent of volume by species is:

Species	Estimated Volume and Unit of Measure	Log Grades %	
		2S	3S
	M Bd. Ft.		
Douglas-fir and Other Coniferous Species			
Douglas-fir	1,525	91	9
Western hemlock	13	46	54
Western redcedar	2	35	65
	Acres		
Utility (Pulp) and Special Cull	121	Per-Acre material not graded	

Total sale area is about 135 acres.

Approximate age 200+ years.

Avg. Volume Per Tree. . . . . 0.890 M bd. ft.

Avg. Diameter of Stand . . . . 26 Inches.

Avg. Diameter of Douglas-fir 27 Inches.

Avg. Diameter of Western hemlock 19 Inches.

Avg. Diameter of Western redcedar 19 Inches.

Estimate of Stand Defect . . . . 15 Percent.

Total number of dead trees to be felled in sale area . 50 .

This is a premarked sale.
The sale includes 2 clearcuts totaling 12 acres, and 5 partial cuts totaling 109 acres.

5. RATES. See attached Appraisal Summary.

THE MINIMUM ACCEPTABLE BID RATE IS STATED IN THE ATTACHED ADVERTISEMENT AND IS THE ADVERTISED RATE SHOWN ON THE ATTACHED APPRAISAL SUMMARY. It is based upon the pricing procedures provided by the Timber Sale Contract, Form 2400-6. This rate has been established by appraisal as though roads specified by the contract are in place. Required deposits for road maintenance and slash disposal are stated in the advertisement.

Rate redetermination date: None.

Estimated Knutson-Vandenberg deposit for sale-area-betterment work in a total amount of $9,082.00 is included in total timber value.

SEE SAMPLE CONTRACT FOR EXPLANATION OF TERMS AND APPLICATION OF RATES.

6. PERIOD OF CONTRACT. The normal operating season shall be considered to be between April 1 and October 31. Contract termination date is March 31, 1982. A general operation plan showing how the purchaser plans to complete sale by the termination date must be approved by Forest Service before operations may begin.

7. PAYMENTS. Payment for timber and related charges will be required in advance of cutting unless purchaser credit is established under or transferred to this contract, or acceptable payment guarantee is provided to permit cutting in advance of payments. Advance payments which the purchaser will be required to make shall be in such amounts as to cover the value of timber estimated to be cut in not less than 30 days and not more than 60 days at the applicable rates for timber and other related charges. Payment requests shall consider the operating plan and past performance of the purchaser. Deposits for cooperative scaling services must be made in advance of furnishing the services.

Purchaser credit established under or transferred into this sale may only be applied to timber charges in excess of timber value at base rates. The amount which may be transferred into this sale will be based on bid value calculated as of the date of award.

8. PERFORMANCE BOND. A performance bond will be required. The penal sum of the bond will be 10 percent of the total bid value of the sale rounded up to the nearest $100 when the total bid value is $10,000 or less, and rounded up to the nearest $1000 when the total bid value exceeds $10,000. The maximum bond will be $200,000.00. The minimum bond will not be lower than $16,000.00.

Purchaser may request a revision in contract language to authorize deferment of payment for timber felled, but not removed, up to the penal sum of the performance bond.

9. SPECIFIED ROADS. See sample contract for verification of specific details and information concerning construction specifications. CONSTRUCTION ESTIMATES ARE NOT GUARANTEED AND INFORMATION CONTAINED HEREIN, TOGETHER WITH RELATED MATERIAL, IS MADE AVAILABLE WITH THE UNDERSTANDING THAT COSTS OR QUANTITIES SHOWN ARE ESTIMATES. The following roads are those which Forest Service considers necessary to remove the timber from this sale.

Road Number	Name	Design Class	Approximate Length (Miles)	Purchaser Credit Limit	Completion Date
NONE					

10. INAPPLICABLE STANDARD PROVISIONS. See sample contract.

11. SPECIAL PROVISIONS. See sample contract.

12. LOG EXPORT AND SUBSTITUTION RESTRICTIONS. The contract prohibits, except as specifically exempted, the export of unprocessed timber or the use of such timber in substitution for timber exported from private lands. Timber determined pursuant to public hearing to be surplus and timber not meeting utilization standards are exempt from these requirements. Unprocessed timber is defined in the sample contract.

Substitution is defined as the purchase of timber from National Forest System lands to be used as replacement for timber exported from private lands. Such replacement occurs when with respect to historic levels, (1) the purchaser continues to export and increases his purchase of National Forest timber or (2) the purchase of National Forest timber continues while the purchaser increases his export of unprocessed timber from private lands tributary to the plant for which National Forest timber covered by a specific contract is expected to be delivered. Historic level is defined as the purchase or export during 1974 or any subsequent calendar year of not to exceed 110 percent of the average volume purchased or exported in calendar year 1971, 1972 and 1973.

For his bid to be considered, bidder must submit therewith a certification that purchase of the timber will not constitute substitution, agree to furnish Forest Service with the names and locations of the manufacturing plants in which the timber is to be manufactured, and agree to make his records as to origin and disposition of export of private timber available to the Forest Service upon request.

Bidders are advised that false certification or violation of the export and substitution requirements may result in cancellation of the contract, refusal to award other timber sales, and/or debarment or suspension from bidding on timber sales.

13. OTHER.

a. Scaling - Scaling designated in A14 shall be conducted by an acceptable third party scaling organization within the established Gifford Pinchot National Forest scaling zone. Log brands must be registered at least 10 days prior to removal of timber (A13).

b. Slash Disposal - Purchaser has the following responsibilities as shown on the Sale Area Map and Slash Disposal Map:

(1) Construct hand and tractor fireline, C6.73#;

(2) Cable Pile Unutilized Material (PUM), C6.74# (Option 4);

(3) Machine and hand pile slash, C6.74 (Option 1);

(4) Cover all slash piles, C6.74 (Option 1); and

(5) Assist with broadcast burning at his own expense, C6.74# (Option 2).

c. Safety - Warning signs and/or flagmen will be required when Purchaser's Operations are conducted on or adjacent to roads and trails open to public travel, C6.33.

d. Alternate Haul - Prospective purchasers are cautioned to determine, before bidding, whether existing roads which they plan to use are available for log hauling.

e. Road Use - Commercial Road Rules Maps of each District that display rules governing use of Forest Service roads (commercial, general and specific rules) dated 8/1/79 are available at each Ranger District office. Prospective purchasers should consult appropriate map when considering haul routes.

f. Special Yarding Objectives - In Subdivisions 2, 3, 5, 6, and 7, tractor shall be limited to an overall blade width of 10 feet, C6.42#.

NATIONAL FOREST TIMBER FOR SALE, GIFFORD PINCHOT NATIONAL FOREST, WILLAME DEER SALE, located within T. 13 N., R. 8 & 9 E., W.M., Surveyed & Unsurveyed. SEALED BIDS will be received by the District Ranger or his representative, Packwood Ranger Station, Packwood, Washington, up to and not later than 9:00 AM, local time at place of bid opening, September 26, 1980, followed immediately by oral bidding for an estimated 1540 M board feet of timber marked or otherwise designated for cutting. The minimum acceptable bid per M board feet is: Douglas-fir and Other Coniferous Species, $98.75. Additional deposit required for slash disposal is $5.73 per M board feet for all species. In addition there is within the sale area an estimated 121 acres of all species pieces subject to per-acre pricing which will be paid for at $0.41 per acre. Additional deposit required for road maintenance on National Forest roads over the appraised route is $2.26 per M board feet for all species pieces priced per M board feet. The contract includes a description of the maintenance work and a breakdown of the per M board foot deposit on a per M board foot per mile basis by roads. In the event that total bid value plus required deposits for this contract exceed one million dollars ($1,000,000) an EEO compliance review will be conducted on the high bidder to determine if the provisions of Executive Order 11246 have been complied with before award can be made. All Included Timber, except that not meeting Utilization Standards, is subject to Timber Export and Substitution Restrictions. Bidders are advised that violations of the Timber Export and Substitution Restrictions constitute breach of contract and may result in contract cancellation, refusal to award other timber sales to the violator, and/or debarment or suspension from bidding on future timber sales. The required bid guarantee is $21,000.00. There are no applicable Purchaser's Road Credits. The right to reject any and all bids is reserved. A prospectus and information concerning the timber, the conditions of sale and submission of bids should be obtained from the District Ranger, Packwood, Washington.

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                              A P P R A I S A L   S U M M A R Y

    SALE NAME: MILLANE DEER                                     SUMMARY CHECKED BY:    R. F. MAT      DATE: 09/19/89
          - - - - - - - - - - - - - - - - - - - - CARD TYPE 5 - - - - - - - - - - - - - - - - - - - - - - - - - - -
    SPECIFIED RD CONST (MILES)      .0          RECONSTRUCTION (MILES)   .0   PUNCH CO LIN $      0  (INC. $      0 PAM **)
                                  14-16                               17-19                 20-25
    PRODUCT:  APPRAISED TO:   HAUL MILES:  13   TEMP RD CONSTR (MILES)   .1   TEMP RD COST $    100
      1        PACKWOOD                   30-32                       27-29   ADJ TO   (APPRAISAL BASE PERIOD):
      4        TACOMA                           BASIC DATA PERIOD:C.Y.1978B   LBR: 2ND QTR 1989
                                                                              PLT: (D) 2ND QTR 1989
                                   - - - - - - - - - - - - CARD TYPE 6 - - - - - - - - - - - - -     UNIT OF MEASURE
     1 PRODUCT/UNIT                        14-15    1-1                          4-1                1     33
     2 SPECIES                                      DFO                          PAM*           TOTAL OR AVERAGE
     3 SPECIES CODE                        16-18    205                          882
     4 % BY SPECIES                                93.00%                        6.00%   T        100.0 %
     5 VOLUME                              19-25    1540                          100   T         1640 34-40
     6 SELLING VALUE                               494.10                       200.20   A       476.67
     7 ADJ FACTOR(SCHED A700)                       0.810
     8 ADJ SELLING VALUE                           400.22                       200.20
     9 CHIP & BYPRODUCTS                            33.84                         0.00
    10 SELLING VALUE L.B.                  26-30   434.06                       200.20   A       420.29
    11 FALLING & BUCKING                             8.07                         3.06   A         7.75 41-44
    12 SKIDDING & LOADING                           27.95                        24.53   A        27.74 45-48
    13
    14 SUBTOTAL: STUMP-TO-TRUCK                     36.02                        27.30
    15 HAUL AND SCALE                                8.40                        36.00   A        10.14 49-52
    16 ROAD MAINTENANCE (INC.2.26 CO-OP)             2.56                         0.00   A         2.40 53-56
    17 SUBTOTAL: TRANSPORTATION                     10.96                        36.00
    18 GENERAL LOGGING OVERHEAD & DEPREC            16.35                        12.61   A        16.12 57-60
    19 (DEPRECIATION INCLUDED IN LINE 18)          ( 4.05)                      ( 4.16)
    20 SUBTOTAL: ADMINISTRATIVE                     16.35                        12.61
    21 SLASH DISPOSAL (INC.   5.73 CO-OP)           14.89                         0.00   A        13.90 61-64
    22 EROSION CONTROL                               1.06                         0.00   A         1.00 65-68
    23 SNAG DISPOSAL                                 0.00                         0.00   A          .00 69-72
    24 MISC.                                         0.69                         0.50   A          .68 73-76
    25 SUBTOTAL: ENVIRONMENTAL PROTECTION           16.64                         0.50
    26 TEMPORARY ROADS & OTHER TEMP DEVPMTS          0.07                         0.00   A          .07 77-80
    27 (OTHER TEMPORARY DEVELOPMENTS)              ( 0.00)                      ( 0.00)  A      (   .00)
    28 SUBTOTAL: TEMPORARY DEVELOPMENT               0.07                         0.00
    29 SUBTOTAL: LOGGING COSTS             31-35    80.04                        77.37   A        79.88
    30 SPECIFIED ROAD COST (AIP)                     0.00                         0.00   A          .00
    31 TOTAL LOGGING COST L.B.                      80.04                        77.37   A        79.88
    32 MFG. COST L.B.                              189.83                       124.31   A       185.83
    33 PRODUCT HAUL                                  5.54                         0.00   A         5.20
    34 MFG. COST L.B.                      36-40   195.37                       124.31   A       191.04
    35 TOTAL PRODUCTION COST L.B.                  275.41                       201.68   A       270.92
    36 CONVERSION (10)-(35)                        158.65                         6.52   A       149.37
    37 P&R RATIO % NORMAL/ADVERTISED                16.00                        16.00 NORM  16.0   ADV  16.6 **
    38 P&R MARGIN NORMAL/ADVERTISED                 59.90                        26.73 NORM 58.00   ADV 56.61 **
    39 INDICATED NET STUMPAGE (36)-(38)             98.75                       -22.21   A        91.37
    40 INDICATED ADVERTISED RATES (  )+(30)         98.75                       -22.21   T    149854.01
                                                                                         A        91.37
    41 BASE RATES                                    6.40                         6.50   A         6.04
    42 ADJUSTMENTS TO BASE RATES                     0.00                        22.71   A         1.30
    43 ADVERTISED RATES (40)+(42)          41-45    98.75                         0.50   T    152125.00
                                                                                         A        92.76
    44 INDICATED STAT NET RATES(43)x(38)            98.75                         0.50   A        92.76
    45 APPRAISED NET RATES                 46-50    98.75                         0.50   A        92.76
    46 BASE INDICES                                  0.00                         0.00
     * PAM*  ACTUALLY APPRAISED AT $    .41/ACRE FOR    121 ACRES.
```

+30 days Contract Awarded

After the 30-day advertisement, prospective bidders submit a sealed bid and bid deposit, which qualifies them to attend an oral auction. At the oral auction bidding begins at the appraised value and the high bidder is awarded the contract.

In the contract the purchaser agrees to pay the high bid rate for timber "scaled" or measured which he takes out. All other timber is considered "slash" or unmerchantable material and is flat rated at an estimated volume by acreage, referred to as Per Acre Material (PAM). The purchaser only pays for the timber he removes. In effect, he has only committed to pay the "bid rate," with the volume being nothing more than an estimate. It is the actual appraisal report which indicates how the appraiser arrived at the value of the timber offered for sale.

The following example of a Report of Timber Sale indicates the appraised value and the bid abstract showing the successful high bidder.

USDA - FOREST SERVICE

REPORT OF TIMBER SALE
CONVERTIBLE AND NONCONVERTIBLE PRODUCTS
(REF. FSM 2494)

REGION 0 6
STATE 5 3
ACRES IN SALE 135
BID DATE 09/26/80
SALVAGE Y
CONT. NO. 06571-5

FOREST Gifford Pinchot 0 3
COUNTY 0 4 1
STATUS 1
PRICING METHOD 1
CONTRACT FORM 2400 6

DISTRICT (OR AREA) Packwood 0 5
SALE NUMBER 0 5 1
SALE NAME WILLAME DEER
LEGAL DESCRIPTION T13NR8ET13NR9E
SBA SET-ASIDE N
PLAN'D SAN COL $ 9,082
CONTRACTING OFFICER D

QTR.-CY 1-8 0
COMPARTMENT 5 5 0 1
APP. BASE PERIOD 2 - 8 0
TERM. DATE 03/31/82/
METHOD OF SALE A
ZONE 2
CONTRACT DATE 09/26/80/
REG. 36CFR223 6

SPECIES	SPEC CODE	PROD. UNIT	VOLUME	ADVERTISED RATES $	STAT. HIGH BID $	HIGH BIDDER $	2ND HIGH BIDDER $	3RD HIGH BIDDER $	4TH HIGH BIDDER $	5TH HIGH BIDDER $	6TH HIGH BIDDER $	7TH HIGH BIDDER $	8TH HIGH BIDDER $	9TH HIGH BIDDER $	10TH HIGH BIDDER $	11TH HIGH BIDDER $	12TH HIGH BID
D&O	205	1-1	1,540	96.75	248.00	248.00	247.00	245.00	165.00	100.00							
*PAH	002	4-1	100	0.50	0.50	0.50	0.50	0.50	0.50	0.50							
TOTAL/AVER.		1	1,640	92.76	232.91	232.91											

SUMMARY OF BIDDERS

RANK	NAME	SBA CLASS	IDENTIFICATION NUMBER	TOTAL VALUE OF BID
HIGH 1	Pacific Lumber Sales Co.	S	3 - RD	$381,970.00
2	Brazier Forest Products, Inc	S	2 - DK	380,410.00
3	Champion International Corp.	L	1 - [illegible]	377,350.00
4	Mt. Adams Veneer Co.	L	1 - CKC	254,150.00
5	Wasser & Winters Co.	S	1 - [illegible]	154,050.00
6			1 - [illegible]	
7			1 - [illegible]	
8				
9				
10				
11				
12				

DISTRIBUTION: Orig. and 1cc to RO (orig. to WO), 1cc to RO of SBA

I certify that I have personally examined the Bids submitted for this sale and that this is an accurate record thereof.

Signature

TITLE ACCOUNTING TECHNICIAN

DATE 9-26-80

REMARKS

Species	2S	3S
D&O	91	9

*PAH sold at the rate of $0.41 per acre for 121 acres; per M pricing for statistical purposes only.

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                              A P P R A I S A L   S U M M A R Y
SALE NAME: WILLAME PEAK                          SUMMARY CHECKED BY:   R. E. MAY      DATE: 08/19/80
  * * * * * * * * * * * * * * * * * * * * CARD TYPE 5 * * * * * * * * * * * * * * * * * * * * * * * *
SPECIFIED RD CONST (MILES)     .0       RECONSTRUCTION (MILES)    .0   PURCH CR LIM $      0  (INC. $       0 P&R **)
                            14-16                              17-19                20-26
PRODUCT:  APPRAISED TO:   HAUL MILES: 1.  TEMP RD CONSTR (MILES)   .1   TEMP RD COST $    100
  1       PACKWOOD                30-32                          27-29   ADJ TO   (APPRAISAL BASE PERIOD):
  4       TACOMA                          BASIC DATA PERIOD:C.Y.1978R   LUM: 2ND QTR 1980
                                                                        PLY: (D) 2ND QTR 1980
                              ******************** CARD TYPE 6 ******************    UNIT OF MEASURE
  1 PRODUCT/UNIT                      14-15   1-1                       4-1              [   3]
  2 SPECIES                                   DLO                       PAM*       TOTAL OR AVERAGE
  3 SPECIES CODE                      16-18   205                       802
  4 % BY SPECIES                             93.90%                     6.10%    T      100.0 %
  5 VOLUME                            19-25   1540                      100      T      1640 34-40
  6 SELLING VALUE                            494.10                    208.20    A      476.67
  7 ADJ FACTOR(SCHED B780)                     0.810
  8 ADJ SELLING VALUE                        400.22                    208.20
  9 CHIP & BYPRODUCTS                         33.84                      0.00
 10 SELLING VALUE L.B.                26-28  434.06                    208.20    A      420.29
 11 FALLING & BUCKING                          8.07                      3.06    A        7.75 41-44
 12 SKIDDING & LOADING                        27.95                     24.52    A       27.74 45-48
 13
 14 SUBTOTAL: STUMP-TO-TRUCK                  36.02                     27.38
 15 HAUL AND SCALE                             8.40                     36.00    A       10.14 49-52
 16 ROAD MAINTENANCE (INC.2.26 CD-OP)          2.56                      0.00    A        2.40 53-56
 17 SUBTOTAL: TRANSPORTATION                  10.96                     36.00
 18 GENERAL LOGGING OVERHEAD & DEPREC         16.35                     12.61    A       16.12 57-60
 19 (DEPRECIATION INCLUDED IN LINE 18)       ( 4.05)                   ( 4.16)
 20 SUBTOTAL: ADMINISTRATIVE                  16.35                     12.61
 21 SLASH DISPOSAL (INC.  5.72 CD-OP)         14.09                      0.00    A       13.90 61-64
 22 EROSION CONTROL                            1.06                      0.00    A        1.00 65-68
 23 SNAG DISPOSAL                              0.00                      0.00    A         .00 69-72
 24 MISC.                                      0.69                      0.50    A         .68 73-76
 25 SUBTOTAL: ENVIRONMENTAL PROTECTION        16.64                      0.50
 26 TEMPORARY ROADS & OTHER TEMP DEVPMTS       0.07                      0.00    A         .07 77-80
 27 (OTHER TEMPORARY DEVELOPMENTS)           ( 0.00)                   ( 0.00)   A     (   .00)
 28 SUBTOTAL:TEMPORARY DEVELOPMENT             0.07                      0.00
 29 SUBTOTAL: LOGGING COSTS           31-33   80.04                     77.37    A       79.88
 30 SPECIFIED ROAD COST (A10)                  0.00                      0.00    A         .00
 31 TOTAL LOGGING COST L.B.                   80.04                     77.37    A       79.88
 32 MFG. COST L.B.                           189.83                    124.31    A      185.83
 33 PRODUCT HAUL                               5.54                      0.00    A        5.20
 34 MFG. COST L.B.                    34-40  195.37                    124.31    A      191.04
 35 TOTAL PRODUCTION COST L.B.               275.41                    201.68    A      270.92
 36 CONVERSION (10)-(35)                     158.65                      6.52    A      149.37
 37 P&L RATIO % NORMAL/ADVERTISED             16.00                     16.00 NORM  16.0  ADV  15.6 **
 38 P&L MARGIN NORMAL/ADVERTISED              59.90                     28.73 NORM 58.88  ADV 56.61 **
 39 INDICATED NET STUMPAGE (36)-(38)          98.75                    -22.21    A       91.37
 40 INDICATED ADVERTISED RATES (39)+(30)      98.75                    -22.71    T   149854.01
                                                                                 A       91.37
 41 BASE RATES                                 6.40                      0.50    A        6.04
 42 ADJUSTMENTS TO BASE RATES                  0.00                     22.71    A        1.38
 43 ADVERTISED RATES (40)+(42)        41-45   98.75                      0.50    T   153125.08
                                                                                 A       93.76
 44 INDICATED STAT NET RATES(12)x(39)         98.75                      0.50    A       93.76
 45 APPRAISED NET RATES               46-50   98.75                      0.50    A       93.76
 46 BASE INDICES                               0.00                      0.00
  * PAM*  ACTUALLY APPRAISED AT $      .01/ACRE FOR      121 ACRES:
```

+1 year **Mobilization**

This is a mobilization period for the purchaser in which he makes the preparation to enter the sale area. Usually no logging activity takes place during this time frame, but some road construction may be started. If the sale is an SBA set-aside sale and the purchaser elects to have the FS build the road, a delay of 120 days will be necessary until the FS can award a public works contract.

+2 year **Road Construction Completed**

+3 to 4 year **Logging Operations Conducted**

During this time frame and prior to any logging, the purchaser must provide payment in advance, usually 1 month's receipts, but generally the purchaser may use a payment bond in lieu of cash. During the logging operations after the timber is cut, it is removed from the forest and "scaled," usually by a third party scaler who in fact is measuring the volume of timber removed from the forest and for which the purchaser will pay. The scaler must determine the "cull" or waste in the timber and adjust his measurements accordingly. The purchaser pays upon receipt of the month's volume reflected in the Monthly Timber Sale Statement of Account shown in the following example.

```
ID: CGM470-01                                     U.S. FOREST SERVICE                                              PAGE    3
    10/14/81 AT 07:26                   AUTOMATED TIMBER SALES ACCOUNTING SYSTEM
                                              CALCULATION OF CHARGES - SCALE SALE

SALE NAME: WILLAME BEER                          SUPPORTING STATEMENT NO.     9              REGION  : 06 PACIFIC N-WEST
CONTRACT : 065715                              FOR THE MONTH OF SEPTEMBER, 1981              FOREST  : 03 GIFFORD PINCHOT
PURCHASER: PACIFIC LUMBER SALES CO    (001166)                                               DISTRICT: 01 PACKWOOD


STUMPAGE CHARGES   SPEC   PRODUCT     UNITS  CURRENT    CURRENT     CHARGES                    QUANTITY REMOVED TO-DATE
                   CODE                      QUANTITY    RATE     THIS PERIOD
                                                                                 SPEC   PRODUCT      UNITS    CURRENT     TO-DATE
                                                                                 CODE                         QUANTITY    QUANTITY
  VOLUME SCALED    C      SAWTIMBER   MBF        0.91    248.00       225.68
                   DFW    SAWTIMBER   MBF      826.33    248.00    204929.84
                   H      SAWTIMBER   MBF        6.00    248.00      1488.00     C      SAWTIMBER    MBF         0.91        0.91
                   ZZC    SAWTIMBER   MBF        0.29    248.00        71.92
                   ZZC    CULL LOGS   PAM      113.00      0.41        46.33     DFW    SAWTIMBER    MBF       826.33      826.33 ✓

   VOLUME TOTALS          SAWTIMBER   MBF      833.53                            H      SAWTIMBER    MBF         6.00        6.00 ✓
                          CULL LOGS   PAM      113.00
                                                                                 ZZC    SAWTIMBER    MBF         0.29        0.29 ✓
   TOTAL STUMPAGE CHARGES        206761.77 ✓         ZZC   CULL LOGS   PAM      113.00       121.00

 • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • • •

                                                                                 TOTAL  SAWTIMBER    MBF       833.53      833.53 ✓
ASSOCIATED CHARGES   CHARGE  CHARGE  UNITS  CURRENT    CURRENT     CHARGES
                     TYPE    ID             QUANTITY    RATE     THIS PERIOD            CULL LOGS    PAM       113.00      121.00

BOOM                 03              MBF
  VOLUME SCALED                              833.53      1.29       1075.25

RD                   03              MBF
  VOLUME SCALED                              833.53      4.44       3700.87

RMCH                 03              MBF
  VOLUME SCALED                              833.53      0.13        108.36

RM                   03              MBF
  VOLUME SCALED                              833.53      1.11        925.22

SRR                  03              MBF
  VOLUME SCALED                              833.53      1.02        850.20

   TOTAL ASSOCIATED CHARGES                                          6659.90

   TOTAL STUMPAGE AND ASSOCIATED-CHARGES                           213421.67

   TOTAL BASE        5380.92    ABOVE BASE     201380.85
```

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APPENDIX A
Page 13

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+5 year **Logging and Cleanup**

During this time frame the logging is completed and the purchaser completes his "slash" disposal work. Slash is the unmerchantable waste material left from the logging operation (PAM). In the Northwest it has become not only valuable as a source of firewood but as "hog fuel" which is a wood fuel source utilized by the timber industry to operate their sawmills. During this time frame the contract is then terminated, and the sales area control is back in the hands of the FS, who then conducts site preparation work for planting during the next season.

+6 year **Reforestation-Planting of Seedlings**

During this time frame the tree seedlings are planted. Due to limited seasons it is difficult to do both site preparation and planting in the same season.

+7 to 10 year **Check of Planted Seedlings**

During this time frame an annual check of the planted seedlings is done to insure successful growth and regeneration in the sales area.

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Explanation of Gate System--Region 8

-10 year Timber Management Plan

At present the timber management plan is utilized at the forest level to set regeneration goals, cutting, and reforestation. The timber management plan will be substituted by the forest plan, which has been 15 years in the writing, and will encompass the multiple resource plans now in effect (the timber management plan, the wildlife, recreation, environment, etc.) in the forests. This substitution has been mandated by the National Forest Management Act of 1976, with an implementation date of FY 1985. The FS has imposed a target date of FY 1983. The present timber management plan schedules the order of entry into each compartment of the forest (a compartment is approximately 1,000-2,000 acres in size) and contains a stand prescription survey (a stand is approximately 2 square miles within the compartment, containing the approximately same age and species of timber), which outlines the resource management work to be done in the next 10 years. Each stand is on a scheduled order of entry on a 10-year cycle.

-3 year 3-Year Action Plan

For planning purposes the timber sales scheduled in FY 1979 will first appear on the forest timber sale action plan in FY 1976. Planning utilizes the formal prescription with regard to anticipated volume, environmental considerations, and road construction.

-3 to 1 year Compartment Prescription and Environmental Assessment

During the third year prior to the anticipated sale, a critical review is conducted in the sale area by an on-the-ground interdisciplinary team, which results in the preparation of an environmental assessment and a defined sales plan. During this time frame the sales area is critically reviewed by an on-the-ground interdisciplinary team; the results develop the environmental assessment and the sales plan. The sales plan and environmental assessment include the silviculture needs, transportation, logging plan, development of alternatives, public involvement, and the selection of recommended alternatives. The following is a sample copy of a Compartment Prescription and Environmental Analysis Report (this contains only the summary of proposed actions, due to the voluminous amount of supporting documents).

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National Forests IN MISSISSIPPI
COMPARTMENT PRESCRIPTION AND ENVIRONMENTAL ANALYSIS REPORT

FOREST BIENVILLE DISTRICT BIENVILLE
COMPARTMENT NO. 81 BUDGETED FY. 79

PREPARED: CHARLES M. HOSEY DATE 5-25-76
PRESCRIBER
RECOMMENDED: DATE 5/28/76
DISTRICT RANGER
REVIEWED: DATE
I.D. TEAM – ENV. COORD.
APPROVED: DATE 7/15/76
Acting FOREST SUPERVISOR

MIS 2400-41
12-75 (REV 12-74)

Description

Summary of Proposed Actions

1. Timber removal by sale is proposed. This action consists of--

   --Regeneration cutting on 150 acres in stands 4,6,7,10.

   --Intermediate cutting on 599 acres in stands 1,2,3,5,8.
   (and 2 acres road ROW's--cleancut)

2. Site Preparation--

   --Mechanical on 150 acres in stands 4,6,7,10.

   --Hand tools on - acres in stands -.

3. Reforestation--

   --Artificial on 42 acres in stands 10.

   --Natural on 108 acres in stands 4,6,7.

4. Fertilization on 8.5 acres in stands 1,2,3,5,8,9.

5. Prescribe burning for--

   --Site preparation on - acres in stands -.

   --Preparation for marking on 292 acres in stands 5,6,7,8,9,10.

   --Rough reduction on - acres in stands -.

   --CIS on 620 acres in stands 1,2,3,5,8,9.

   --Other burning - acres in stands -.

6. Road building--

   --System roads: 2.6 miles.

   --Nonsystem roads: 2.5 miles.

7. Timber Stand Improvement--

   --Release on - acres in stands -.

   --Re-Commercial thinning on ____ acres in stands -.

-1 year **Marking and Measurement**

The proposed sales area is actually measured through the tree measurement process. The purchaser will pay for volume measured. The measurement is done either by counting and measuring 100 percent of the trees or by measuring a randomly sample of trees (i.e., 1 in 20) according to diameter and height.

During the time the trees are being measured, they are also marked with FS tracer paint to delineate logging or sale units, which are administrative sale sections of the compartment, and only those trees marked are allowed to be taken by the purchaser. In the event an unmarked tree is intentionally or unintentionally taken by the purchaser, he pays twice the agreed upon contract rate.

-6 months **Appraisal of Sale**

The appraisal of the proposed sale is conducted. Region 8 uses the TEA method, which is devised on a running 4-quarter cumulative sales, comparing the actual sales price to the asking price. The advertised or appraised price is determined by using comparable TEA and computed volume of the measurements.

0 year **Sale Advertised**

During this time frame after the appraisal has been completed, the contract is advertised for a period of 30 days by the forest supervisor. During the advertising period, the district forest ranger will conduct "show me" trips for prospective purchasers who wish to see the sales area, and at their own discretion may "cruise," a method of measuring volue, the area in an attempt to determine their own estimation of the volume of the timber being offered. The following is an example of a timber sale prospectus utilized by Region 8 and is available to all prospective buyers. It is noted Region 8 considers its measurements to be accurate to ± 5 percent.

Forest Supervisor
U S Forest Service
Box 1291
Jackson, MS 39205
(Date) April 27, 1979

SBA SET-ASIDE SALE

TIMBER SALE PROSPECTUS

Bienville National Forest

Bienville Ranger District

1. INTRODUCTION.
This prospectus is to furnish sufficient information in addition to that contained in the published advertisement, to enable prospective bidders to decide whether further investigation of the sale is warranted. INFORMATION GIVEN HERE OR OTHERWISE PROVIDED IS NOT A PART OF THE CONTRACT UNLESS STATED THEREIN. DETAILED CONDITIONS OF SALE ARE CONTAINED IN THE SAMPLE TIMBER SALE CONTRACT. IN THE EVENT A CONTRADICTION EXISTS BETWEEN THIS PROSPECTUS AND THE SAMPLE CONTRACT, THE CONTRACT GOVERNS. Timber Sale Contract, Form 2400-6T will be used. Sale area and sample contract should be inspected before submitting a bid. The appraisal, and other information on the timber, conditions of sale and bidding may be obtained at Forest Service offices named in the attached advertisement.

2. BIDDING.
This is a SEALED BID. Submit bids on the attached prepared forms. Additional forms may be obtained from the Forest Service Offices listed in the advertisement. These forms include instructions for sealed bids as well as for submission of the bid guarantee. Telegraphic bids are acceptable. Telegram should show (1) sale identification, (2) bid rate for each item offered and must be received prior to the stated time for bid opening. Bid deposit must accompany telegram bid. Award will be withheld until completed and signed bid form is received.

3. LOCATION AND AREA.
Refer to sale-area map and to the sample contract for legal subdivisions and location of cutting area, acreage of sale, acreage to be cut, etc. THE FOLLOWING GENERAL LOCATION, ROUTES OF ACCESS, ACREAGES, AND OTHER SPECIAL LOCATION DATA DO NOT SUPERSEDE THE SALE-AREA MAP OF SAMPLE CONTRACT.

The proposed sale area is located in Compartment 81, Bienville District, Bienville National Forest, Scott County, Mississippi, an average distance of 11 miles South of Forest, Mississippi. It comprises a gross area of 793 acres, 751 of which are estimated to be operable. There are 44* acres of clearcut; 599 acres of thinnning; 108 acres of seed tree cut; 0 acres of seed tree removal cut. See attached map for access.
*Includes 1 acre clearcut for road 567-A ROW & 1 acre clearcut for temporary road ROW payment unit 9.

4. DESCRIPTION OF TIMBER.
INFORMATION LISTED HEREIN IS MADE AVAILABLE WITH THE UNDERSTANDING THAT VALUES SHOWN ARE NOT A PART OF THE TIMBER SALE CONTRACT. For these reasons bidders are urged to examine the timber sale area and make their own recovery estimates.

The estimated quantity of timber was determined by tree measurement in accordance with the methods and procedures described in R-8 Instructions for Determining Timber Quantity by Tree Measurement, a copy of which may be examined in the Forest Supervisor's or District Ranger's Office.

THIS TIMBER HAS BEEN DESIGNATED FOR CUTTING IN THE FOLLOWING MANNER:

Marked with orange, blue, yellow and green paint. Sawtimber trees are marked with two paint spots at ground level and one spot at eye level. Small roundwood trees are marked with one spot at ground level and one spot at eye level.

THE FOLLOWING LISTED QUANTITIES ARE UNGUARANTEED ESTIMATES:

PINE SAWTIMBER

Estimated Number of Trees by Diameter Classes:

9"	10"	11"	12"	13"	14"	15"	16"	17"	18"	19"	20"	21"	22"	23"	24"	25"	26"+
946	515	2959	2765	1948	1569	1340	1036	445	591	428	137	317	134	64	34	31	25

Total No. Trees 15,284
Estimated Total Volume 2,186 MBF
Other Statistical Sawtimber Information:

Number of Logs per MBF 18
Average Volume per Tree 143 BF
Average Volume Cut per Acre 2958 BF
Volume by Species:
  Loblolly 2084 MBF
  Shortleaf 102 MBF
  Spruce - MBF
  Longleaf - MBF
  Slash - MBF

PINE SMALL ROUNDWOOD
(Material Suitable for Pulpwood, Posts, etc.)

Estimated Number of Trees by Diameter Classes:

5"	6"	7"	8"	9"	10"	11"	12"+
443	3420	5177	4105	2440	1582	3	10

Total Number Trees 17180
Total Estimated Volume CCF 1134

Other Statistical Pine Small Roundwood Information:

Trees per CCF 15
Average Volume Cut per Acre CCF 2.1

SAWTIMBER TOPWOOD

This sale contains the following estimated quantity of topwood in the pine sawtimber trees:

Topwood Volume CCF 444

ALL FOREST SERVICE ESTIMATES OF VOLUME ARE MADE ON THE BASIS OF SCRIBNER LOG SCALE FOR SAWTIMBER AND CCF (100 CUBIC FEET SOLID WOOD) FOR SMALL ROUNDWOOD.

FOREST SERVICE MAY DESIGNATE ADDITIONAL TREES FOR CUTTING AS PROVIDED IN THE TIMBER SALE CONTRACT. ANY ADDITIONAL TREES WILL BE SOLD ON A PER UNIT BASIS AT RATES SPECIFIED IN SECTION AT5b OF THE CONTRACT.

5. VOLUMES AND RATES.

SEE SAMPLE CONTRACT FOR EXPLANATION OF TERMS AND APPLICATION OF RATES.

THIS IS A UNIT RATE SALE OF SAWTIMBER AND SMALL ROUNDWOOD.

THE MINIMUM ACCEPTABLE UNIT RATE BID IS STATED IN THE ATTACHED ADVERTISEMENT AND IS THE ADVERTISED UNIT RATE SHOWN ON THE ATTACHED BID FORM. It is based upon the pricing procedures provided by the Timber Sale Contract, Form 2400-6T. This rate has been established by appraisal as though roads specified by the contract are in place.

Estimated Knutson-Vandenberg deposits for sale-area-improvement work in a total amount of $ 21,316.00 is included in the total timber value.

6. PERIOD OF CONTRACT.

The normal operating season shall be considered to be between April 15 and November 15. Contract termination date is November 15, 1980.

7. PAYMENTS.
Payment for timber and related charges will be required in advance of cutting unless purchaser credit is established, purchaser credit is transferred into the contract, or an acceptable payment guarantee is provided to permit cutting in advance of payments. Advance deposits which the purchaser will be required to make shall be in such amounts as to cover the full value of the payment units to be released for cutting. Payment requests shall consider the operating plan and past performance of the purchaser.

Purchaser credit established under this timber sale may only be applied to charges for timber in excess of timber value at base rates.

This sale has been divided into 12 payment units. Only 3 units will be released for cutting at any one time. The usual procedure is to complete one unit before starting in another.

When specified roads are constructed by the purchaser, applicable purchaser credit up to the amount shown in the advertisement will be credited to purchaser's timber sale account as specified roads are constructed and accepted.

Purchaser credit transferred to this timber sale may only be applied to charges for timber in excess of base rate value, the value of required deposits and any amount above base rates for which cash will be needed to accomplish cultural work specified in the original Sale Area Improvement Plan. Cash deposits will be required to cover base rates, required deposits and any amount above base rates needed for cultural work. Unused effective purchaser credit in excess of that actually applied to charges for timber may be carried forward to the next statment and used as advanced deposits to offset the need for cash and/or payment bond.

If a qualified purchaser elects to have the Forest Service construct Specified Roads, the contract will provide for collection of not less than the full estimated cost of the roads stated in the advertisement in addition to Base Rate Value and Required Deposits. The contract will provide for collecting the full estimated cost of roads based upon premeasured volume. Cash deposits will be required when payments for stumpage include less value above Base Rates than is needed to meet the collection schedule established in the contract.

If Purchaser elects Forest Service construction, payment for right-of-way timber will be made in advance of felling of timber. The timber will be decked by the road contractor and will be available to the Purchaser when notified by Forest Service of location and availability.

8. PERFORMANCE BOND.
A performance bond will be required. The penal sum of the bond will be 10 percent of the bid value rounded up to the nearest $100.00 when the contract bid value is $10,000.00 or less, and rounded up to the nearest $1,000.00 when the bid value exceeds $10,000.00. The maximum bond will be $200,000.00.

9. SPECIFIED ROADS.
See sample contract for verification of specific details and information concerning construction specifications. CONSTRUCTION ESTIMATES ARE NOT GUARANTEED AND INFORMATION CONTAINED HEREIN, TOGETHER WITH RELATED MATERIAL, IS MADE AVAILABLE WITH THE UNDERSTANDING THAT COSTS OR QUANTITIES SHOWN ARE ESTIMATES. The Forest Service considers the following specified road construction or reconstruction necessary for the operation of this timber sale.

ROAD NO.	DESIGN CLASS	APPROXIMATE LENGTH (MILES)	PURCHASER CREDIT LIMIT	REQUIRED COMPL. DATE
567-A	S-10	.61	$28,238.00	April 13, 1980

Road plans and specifications will be made a part of the timber sale contract. They should be reviewed prior to bidding for the timber. Copies are available at the Forest Supervisor's Office, Jackson, MS, or the District Ranger's Office, Forest, Mississippi.

ROAD OPTION
A bidder qualifying as a small business concern may elect to have the Forest Service construct Specified Roads listed above. Completion dates for construction shall apply whether construction is performed by Purchaser or Forest Service.

If bidder elects Forest Service construction, it is Forest Service's intent to perform construction through public works contract. When construction is to be by public works contract, the award of the timber sale contract will not be made unless either a satisfactory road construction bid is received, or if Forest Service fails to receive such a bid within 120 days of determination of acceptable high bidder, bidder agrees to perform road construction.

10. INAPPLICABLE STANDARD PROVISIONS.
See sample contract.

11. SPECIAL PROVISIONS.
See sample contract.

12. FINANCIAL ASSISTANCE.
The Small Business Administration (SBA) may be able to assist small business concerns finance construction of specified roads listed in the sample timber sale contract. SBA assistance, if available, may be in the form of guaranteed bank loans or direct participation SBA loans. Applicants must meet SBA size and eligibility requirements. APPLICANTS ALSO MUST MEET CREDIT REQUIREMENTS OF SBA AND/OR A LOCAL BANK. APPROVAL OF LOAN ASSISTANCE RESTS WITH SBA AND IS CONTINGENT ON AVAILABILITY OF LOCAL OR SBA FUNDS. FAILURE TO BE ELIGIBLE OR TO OBTAIN A LOAN WILL IN NO WAY AFFECT REQUIREMENTS OF BID FOR ADVERTISED TIMBER OR TIMBER SALE CONTRACT.

13. NONDISCRIMINATIONS IN EMPLOYMENT.
All contracts over $10,000.00 in gross value will require purchaser compliance with the terms of the President's Executive Order on Equal Employment Opportunity.

Executive Order 11246 requires submission of compliance reports from a purchaser and subcontractor if either employs at least 50 men and if the net bid value of the contract is $50,000.00 or more.

In the event that total bid value plus required deposits for this contract exceeds one million dollars ($1,000,000) an EEO compliance review will be conducted on the high bidder to determine if the provisions of Executive Order 11246 have been complied with before award can be made.

14. SET-ASIDE SALE.
Preferential award of this sale to a small-business concern is authorized by section 15 of the Small Business Act of 1958. Any bidder who desires a preferential consideration for award as a small business must certify his status as specified on the bid form. A bidder who does not certify his status as a small business will be qualified for sale award only in the absence of a valid sealed bid from a small-business concern. In the absence of any bids, the sale may be made to a concern without limitation as to size under 36 CFR 223.5(g).

15. SAFETY.
Purchaser shall furnish, install and maintain all temporary traffic control devices which provide the user with adequate warning of hazardous or potentially hazardous conditions associated with purchaser's operations.

16. EROSION CONTROL.
Purchaser shall revegetate areas where soil disturbance will result in soil losses from erosion, by seeding or planting with grass or desirable plant material, when cross-ditching or similar measures will not result in satisfactory control. Purchaser shall revegetate areas specified by the Forest Service in accordance with the specifications listed in CT6.601 of the Timber Sale Contract.

If the Forest Service performs this work as provided under Section BT4.225, purchaser shall deposit $ 1,273.00 lump-sum for such purposes.

The estimated cost of water bar construction required under BT6.6 of the contract is $ 208.00 if the Forest Service does the work.

17. SHOW-ME-TRIP. Time: 9:00 AM May 14, 1979
District Ranger's (Date)
Place: Office, Forest MS

Prospective bidders are expected to attend. If unable to attend, get all the details necessary to prepare your bid from the District Ranger, U S Forest Service, Forest, Mississippi. A sample contract, applicable to this sale will be furnished upon request.

APPENDIX B
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U.S. DEPARTMENT OF AGRICULTURE
Forest Service

BID FOR ADVERTISED TIMBER
(Reference FSM 2430)

1. SALE NUMBER	2. DATE BID OPENED 10:00 AM May 29, 1979	3. OPENED BY

4. SALE NAME Compt 81	5. IN THE PRESENCE OF

6. NATIONAL FOREST Bienville	7. RANGER DISTRICT Bienville	8. TYPE OF BID *(X Appropriate Box)* ☐ Confirmation of Oral Bid ☒ Sealed Bid

9. TO *(Title & address of Forest Officer receiving bids)* District Ranger, U S Forest Service Box 30 Forest, MS 39074	10. NAME OF NEWSPAPER Jackson Daily News	11. DATE PUBLISHED April 26, 1979
	12. CITY Jackson	13. STATE MS

INSTRUCTIONS TO FOREST OFFICER: Complete applicable blanks before sending to prospective purchasers. Attach copy of notice of sale. Entries are required in columns a, b, c, e, and f, in all sales. Strike out spaces for entries in one or more of columns d, g, or h, if not applicable to the sale.

In response to the notice of sale published in the newspaper specified above, and subject to the provisions on page 3, the following bid is submitted:

14. BID INFORMATION SPECIES AND PRODUCTS (a)	UNIT OF MEASURE (b)	ESTIMATED QUANTITY (c)	RATES PER UNIT OF MEASURE Base (d)	 Advertised (e)	 Bid (f)	 Additional deposits required for slash disposal (g)	BASE INDICES (h)
Pine Sawtimber	MBF	2186	3.00	147.08			
Pine Small Rdwd	CCF*	1578	1.50	11.17			
*Includes topwood from sawlog trees.							
The amount of bid guarantee required by Item 8, Page 3, is $28,300.00.							
All bids must be made to the full cent. Bids of fractions of cents will not be considered in determining the total return to the United States.							

Timber volume required to be cut and scaled before lower rates developed from scheduled rate redetermination can become effective is ____________________ M board feet.

CONTRACT AND BONDS – The bidder whose bid is accepted will, within 30 days of notice of award, or any written extension thereof by the Forest Service, execute a timber sale contract and furnish a satisfactory performance bond, in accordance with the provisions of such timber sale contract, in the penal sum as prescribed in the prospectus for this sale.

Previous editions of this form are obsolete.

2400-14 (5/78) Page 1

U.S. DEPARTMENT OF AGRICULTURE
Forest Service

CERTIFICATE OF INDEPENDENT PRICE DETERMINATION

1. BIDDER CERTIFIES:

a. By submission of this bid each bidder certifies, and in the case of a joint bid each part thereto certifies as to its own organization, that in connection with this procurement:

(1) The prices in this bid have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;

(2) The prices which have been quoted in this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder prior to opening of bid, directly or indirectly to any other bidder or to any competitor; and

(3) No attempt have been made or will be made by the bidder to induce any other person or firm to submit or not to submit a bid for the purpose of restricting competition.

b. Each person signing this bid or proposal certifies that:

(1) He is the person in the bidder's organization responsible within that organization for the decision as to the prices being bid herein and that he has not participated, and will not participate, in any action contrary to a(1) through a(3) above; or

(2) He is not the person in the bidder's organization responsible within that organization for the decision as to prices being bid or offered herein but that he has been authorized in writing to act as agent for the persons responsible for such decision in certifying that such persons have not participated, and will not participate, in any action contrary to a(1) through a(3) above, and as their agent does hereby so certify; and that he has not participated, and will not participate, in any action contrary to a(1) through a(3) above.

c. A bid will not be considered for award where a(1), a(3), or b above has been deleted or modified. Where a(2) above has been deleted or modified the bid will not be considered for award unless the bidder furnishes with the bid a signed statement which sets forth in detail the circumstances of the disclosure and the Chief, Forest Service, or his designee, determines that such disclosure was not made for the purpose of restricting competition.

INSTRUCTIONS: Each bidder must check appropriate boxes in items (a), (b), and (c) below.

(a) That he ☐ has, ☐ has not employed or retained any company or person (other than a full-time bona fide employee working solely for the bidder) to solicit or secure a contract for this timber.

. That he ☐ has, ☐ has not paid or agreed to pay any company or person (other than a full-time bona fide employee working solely for the bidder) any fee, commission, percentage or brokerage fee, contingent upon or resulting from the award of contract for this timber, and agrees to furnish information relating thereto as requested by the officer authorized to approve the timber sale contract.

(c) That he ☐ has, ☐ has not participated in a previous contract subject to the provision of section 202 of Executive Order 11246 (Non-discrimination in Employment) of 9/24/65, as amended; and that he ☐ has, ☐ has not submitted required compliance reports under such previous contracts.

Enclosed is bid guarantee, in accordance with item 8 under Instructions to Bidders, consisting of:

______________________________ in the amount of: $ ______________________________.
(See Instruction 8, Bid Guarantee)

☐ X Box if you are a Small Business and wish to have Forest Service construct specified roads. You may not change an election once made. Failure to mark box constitutes agreement to build roads. Election may not be changed subsequent to time set for opening bids. (Note item 13 on page 3.)

BIDDERS ACKNOWLEDGE THAT FOREST SERVICE ESTIMATES OF COSTS AND TIMBER VOLUMES ARE NOT GUARANTEED AND THAT THE FOREST SERVICE GRANTS NO WARRANTY, EITHER EXPRESS OR IMPLIED OF THEIR ACCURACY. BIDDER EXPRESSLY DISCLAIMS ANY RELIANCE ON FOREST SERVICE COST ESTIMATES AND TIMBER VOLUME ESTIMATES IN SUBMITTING THIS BID.

NAME OF BIDDER *(Type or Print)*	BY *(Signature in Ink)* REVIEW CONDITIONS ON PAGE 3 BEFORE SIGNING	
BUSINESS ADDRESS *(Include Zip Code) (Type or Print)*	TITLE *(Type or Print)*	DATE
FULL NAME OF ALL PARTNERS *(Type or Print)*		

U. S. DEPARTMENT OF AGRICULTURE - Forest Service

INSTRUCTIONS TO BIDDERS

1. **CONDITIONS AFFECTING SALE COMPLIANCE PRIOR TO BIDDING.** Bidders should inspect the sale area, review the requirements of the sample timber sale contract, and take such other steps as may be reasonably necessary to ascertain the location, estimated volumes, quality development, and operating costs of the offered timber. Failure to do so will not relieve bidders from responsibility for completing the contract.

2. **BIDDER'S QUALIFICATIONS.** Before a bid is considered for award, the bidder may be requested by the Government to submit a statement regarding his previous experience in performing comparable work, his business and technical organizations, financial resources, and plant available to be used in performing the work.

3. **PREPARATION OF SEALED BIDS.** Bids shall be manually signed, bid prices entered in the column "Bid" for all material subject to bidding and representations completed. If erasures or other changes appear on the forms, each erasure or change must be initialed by the person signing the bid.

4. **PUBLIC OPENING OF SEALED BIDS.** Sealed bids will be publicly opened and posted at the time set for opening in the advertisement.

5. **ORAL AUCTION BIDDING.** If the advertisement provides for ORAL AND SEALED bids, each bidder to participate in the oral auction must submit a sealed bid in accordance with instructions. All parties who submit a satisfactory sealed bid will be permitted to continued bidding orally immediately following opening and posting of the sealed bids. The high bidder must confirm his bid in writing immediately upon being declared the high bidder.

6. **SUBMISSION OF SEALED BIDS.** Sealed bids must be submitted to the Forest Officer, designated by the advertisement as the receiving officer, at or prior to the time established by the advertisement. Such bids should be enclosed with the required bid guarantee in a sealed envelope addressed to the designated receiving officer. The envelope should show on the outside (a) that it is a "Bid for Timber," and (b) the sale name or number, and the date and time of opening bids as shown by the advertisement.

7. **SET-ASIDE SALES.** If the advertisement or prospectus of sale states that small-business concerns will receive preferential consideration in award of this sale, bidders must qualify for preferential consideration by completing and signing the attachment to this bid form "Certificate of Small Business Status." Small Businesses which have been determined by SBA to be ineligible for preferential award of set-aside sales cannot so qualify. Small businesses awarded set-aside sales will also be required to execute SBA form 723, Small Business Certification Required On All Preferential Sales of Set-Aside Timber, at time timber sale contract is executed.

8. **BID GUARANTEE.** A bid guarantee in the form of cash, a bid bond on form 2400-24, certification of annual bid bond allocation from form 2400-24a, or an irrevocable letter of credit, a certified check, bank draft, cashier's check, or bank money order payable to the Forest Service, USDA, in the amount specified by the advertisement as the bid guarantee must accompany each bid. Any deposits of money will be applied to the purchase price, retained for application toward payment of damages for failure to execute and fulfill contract, or refunded. Failure to submit an acceptable bid guarantee will require rejection of the bid as unresponsive unless there is no other acceptable bid. Bid bonds must be accompanied by a power of attorney indicating that the person signing the bond for the surety has the power to do so. The bid bond or annual bid bond allocation of the successful bidder must be replaced, at or prior to the time of execution of contract, by an advance payment, or negotiable United States securities for stumpage and related deposits, equal to the amount of the bid guarantee provided by the advertisement. The Forest Service will draw upon the successful bidder's letter of credit at time of award for the amount of the bid guarantee.

9. **AWARD OF CONTRACT.** (a) Award of contract will be made to that responsible bidder whose bid, conforming to the invitation for bids, is most advantageous to the United States on the basis of total value at rates bid for the-estimated quantities. (b) The government may, when in its [illegible], reject any or all bids or waive any informality in bids received. (c) A written award mailed (or otherwise furnished) to the successful bidder [illegible] be deemed to result in a binding contract without further action by either party. (d) If timber is advertised as set-aside for competitive bidding by small businesses, award will be made to the highest bidder who qualifies as a small business and who has not been determined by the SBA to be ineligible for preferential award of set-aside sales.

10. **DAMAGES.** Failure to execute a timber sale contract or to furnish a satisfactory performance bond within the time allowed may be treated as a repudiation of the contract, and any or all of the bid guarantee may be retained by the Forest Service and applied toward satisfaction of actual damages resulting from the bidder's failure to fully perform the contract, without prejudice to any other rights and remedies of the United States.

11. **PRIVACY ACT.** All personal information is requested on a voluntary basis; however, if you do not provide this personal information, your bid will not be accepted. Solicitation of this information is necessary for the government to conduct its sale program and thus is authorized under the National Forest Management Act of 1976, (16 U.S.C. 472a). The principal purpose for collecting this information is to allow for proper award of a timber sale contract and to provide for administration of that contract after award. Other routine uses of this data include: (1) compilation of small business data to determine needs for set-aside sales, (2) determination of volume purchased in any specific time period by a single purchaser, and (3) determination of volume under contract by a purchaser.

12. **ROAD COMPLETION DATE.** Bidder hereby acknowledges that he is aware of the road completion date of the sample contract. Bidder also acknowledges that if he is a small business and elects to have Forest Service construct specified roads, he is aware: (a) that the Forest Service expects to contract for road construction (b) that the timber sale contract will not be awarded unless a satisfactory road construction bid is received or, if the Forest Service fails to receive such a bid within a maximum period stated in the advertisement, the bidder agrees to perform road construction, (c) that the Forest Service may extend the maximum award delay time by the amount of time needed to confirm the bidder's size status or by any time in excess of 40 days from timber sale bid opening needed to begin solicitation of construction bids, and (d) that if the Forest Service extends the maximum award delay period because solicitation of the road contract is delayed, the bidder may withdraw his bid without penalty.

*13. **ELECTION OF ROAD OPTION AND CERTIFICATE OF SMALL BUSINESS STATUS.** Bidders qualifying as a small business concern under the Small Business Act, as amended, and the regulation thereunder, may elect to have Forest Service construct Specified Roads required by the contract. Bidder who does not elect agrees, if awarded contract, to construct roads in accordance with the contract. Bidder who does elect acknowledges that he is aware of and agrees to the conditions stated in item 12 above and that he is a small business concern within the terms of the definition listed below:

> In sales of National Forest timber a small business is a concern that: (1) is primarily engaged in the logging and forest products industry; (2) is independently owned and operated; (3) is not dominant in its field of operation; and (4) together with its affiliates does not employ more than 500 persons.

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*NOT APPLICABLE IF THE TOTAL VALUE OF SPECIFIED ROADS IS LESS THAN $20,000.

U. S. Department of Agriculture
Forest Service

ADDENDUM TO BID FOR ADVERTISED TIMBER

This is a small business set-aside sale. Bids from others will be considered if no valid bid is received from a small business concern.

Notice to Bidders on Set-Aside Sales

Preferential award of this sale to a small business concern is authorized by Section 15 of the Small Business Act of 1958. Any bidder who desires such preferential consideration must certify to his status by signing the "Certificate of Small Business Status" at the end of this page. Forest products industry under Item (1) refers to an industry which utilizes the wood obtained from trees that serve as the principal source of raw material. If you are the high bidder and your representation is questioned by either the contracting officer or another bidder within 5 working days of bid opening, award of this sale will be deferred pending consideration by the Small Business Administration. Concerns not certifying themselves as small business and small business concerns determined by the Small Business Administration to be ineligible for preferential award of timber sales will not be qualified for sale award if an acceptable sealed bid is received from a qualified concern so certifying itself.

Any concern which self-certifies as a small business concern for the purpose of the sale of Government-owned timber is expected to maintain sufficient documentary evidence to show that it did so in good faith. This means that a concern which sells or exchanges timber or sawlogs from this sale will maintain the names and addresses of the concerns to whom the timber is sold or exchanged, and size of such concerns, and the volume involved. If the sawtimber is to be manufactured into a product, such manufacture will be done with his own facilities or those of another concern that qualifies as a small business.

In addition to the following "Certificate of Small Business Status", the successful bidder will be required to complete a "Small Business Certification Required on all Preferential Sales of Set-Aside Timber" at the time the sale contract is executed. The SBA certification reconfirms his representation as to size status; provides assurance that records of all timber sales or exchanges from this sale will be maintained for 3 years; and acknowledges the possible penalties for violating the foregoing.

(over)

Certificate of Small Business Status

The bidder represents that he is a small business concern within the terms of definitions listed below:

(A) In sales of National Forest timber, a small business concern is a concern that (1) is primarily engaged in the logging or forest products industry; (2) is independently owned and operated; (3) is not dominant in its field of operation; and (4) together with its affiliates does not employ more than 500 persons.

(B) In sales of National Forest timber with any part to be resold, a small business is a concern that (1) meets the requirements of Item 1 above; and (2) agrees that it will not sell or exchange more than 30 percent of such timber to a concern which does not qualify as small business.

(C) In sales of National Forest timber not to be resold for manufacture into lumber and timbers, a concern is small business when (1) it meets the requirements of Item 1 above; and (2) agrees that in manufacturing lumber or timbers from National Forest timber, it will do so only with its own facilities or those of concerns that qualify as a small business.

______________________ Date

______________________ Signature of Bidder

NOTE: THIS FORM MUST BE ATTACHED TO YOUR BID.

18. PRE-ENTRY CONFERENCE - IMPORTANT!
A pre-entry conference between the Forest Service Representative (usually the District Ranger) and the designated company representative will be a requirement before the purchaser starts logging operations. The logging contractor for the company should also attend the meeting if he is not the company representative.

The purpose of the pre-entry conference is to be sure that the purchaser completely understands what is expected of him and thus avoid misunderstandings or serious conflicts.

The District Ranger will make arrangements with the purchaser for the pre-entry conference.

19. GENERAL INFORMATION ABOUT THE SALE.

There may be within the sale area boundary Red Cockaded Woodpecker colonies. The Red Cockaded Woodpecker is included on the Federal Register of Endangered and Threatened Species and protected under the 1973 Endangered Species Act. The damaging of a cavity tree constitutes a violation under this Act. Cavity trees can be recognized by large amounts of pitch on the bole of the tree around the cavity hole.

Known colony sites are designated on the ground by painting a 200 foot buffer zone around the cavity tree. Trees around the perimeter of the zone are marked with a band of gray paint. The cavity tree is marked with two bands of gray paint.

The Forest Service implemented a new extension policy on July 1, 1978. That policy aplies to this contract. The most important provision of that policy is that extensions will normally not be granted unless:

(1) Specified roads needed by the Purchaser for removal of all included timber in accordance with his aproved plan of operations were constructed and accepted by the Forest Service prior to the applicable road completion date. (Not applicable when Forest Service assumes responsibility for construction of roads).

(2) At least 75 percent of the advertised volume has been cut and removed from the sale area.

(3) Operations to date have been in reasonable compliance with contract terms and the approved plan of operations.

(4) Contractural requirements, such an snag felling, erosion control, and slash disposal, have been accepted on the area cutover, except for areas where logging is currently in progress. Purchaser's burning of current slash or grass seeding of disturbed areas may be waived as a prerequisite for extension, if weather conditions or other factors have delayed these activities.

Purchaser will be required to furnish and spread approximately 250 cubic yards of gravel on temporary roads and to maintain road 567-A.

APPENDIX B
Page 19

SUMMARY OF EXPECTED CUT BY PAYMENT UNITS

Payment Unit & Color Paint		Net Acres & Type Cut		Number of Trees Marked				ESTIMATED CUT PRODUCT Sawlogs-MBF		Pine Rwd CCF		Topwood CCF	
				Pine S/T	Hdwd S/T	Pine S/W	Hdwd S/W	Pine	Hdwd	Pine	Hdwd	Pine	Hdwd
1	orange	22	ST	1054		1008		176		67		36	
2	orange	50	ST	1504		958		395		63		80	
3	orange	36	ST	1443		3175		186		180		38	
4	orange	12	IC	-		311		-		24		-	
5	blue	52	IC	1485		-		149		-		30	
6	yellow	107	IC	2373		2827		181		220		37	
7	yellow	104	IC	2199		-		354		-		72	
8	orange	52	IC	348		-		30		-		6	
9	green	1	ROW	10		40		1		2	2	-	
	blue	127	IC	1093		2219		157		140	-	32	
10	blue	42	CC*	752		2067		128		85	-	26	
11	blue	145	IC	2929		4436		414		346	-	84	
12	green	1	ROW	94		139		15		7	1	3	

*There may be some trees in this unit that are not designated to be cut. Only designated trees are to be cut.

NATIONAL FOREST TIMBER FOR SALE

Sealed bids (or telegraphic bids) will be received by the District Ranger, Box 30, Forest, Mississippi up to 10:00 a.m., local time at the place of bid opening on May 29, 1979, and opened immediately thereafter, for all timber marked or designated for cutting, located on an area of about 793 acres within compartment 81, Sections 25, 26, 34, 35 & 36, Township 5N, Range 8E, Bienville District, Bienville National Forest, in Scott County, MS. The volume is estimated to be 2186 MBF pine sawtimber, and 1578 CCF pine small roundwood, more or less. The minimum acceptable bid is: pine sawtimber $147.08 per MBF, pine small roundwood $11.17 per CCF, including deposit for sale area betterment. $28,300.00 in the form of a certified check, bank draft, cashier's check or money order, must be deposited with each bid to be applied on the purchase price, refunded, or retained as damages, according to conditions of the sale. In accordance with the National Forest Management Act of 1976 a bidder qualifying as a small business under the Small Business Act, (as amended and the regulations issued thereunder) may elect at the time of sealed bid submission to have the Forest Service construct the included specified roads. If the bidder elects to have the Forest Service construct the roads, the price paid for the timber shall include the estimated construction cost which is $28,740.00. Such road will be constructed to the design classes and in accordance with drawings and specifications included in the sample contract. Purchaser Credit Limit is stated in the sample contract and is $28,238.00. Specified roads, whether constructed by the purchaser or the Forest Service, shall be completed by April 13, 1980.

If the bidder elects to have the Forest Service construct the roads, the Forest Service intends to perform construction by contract. When the Forest Service intends to construct the road through a contract, award of the timber sale will not be made unless either a satisfactory road construction bid is received, or if Forest Service fails to receive such a bid within 120 days of determination of acceptable high bidder, bidder agrees to perform road construction. This is a small business set-aside sale. Bids from others will be considered if no valid bid is received from a small business concern. The final sale award will be made by the Forest Supervisor. The right to reject any and all bids is reserved. Before bids are submitted, full information concerning the timber, the sample contract, the conditions of sale and submission of bids should be obtained from the Forest Supervisor, U S Forest Service, Box 1291, Jackson, MS, 39205, or from the District Ranger, Forest, MS, 39074.

Advertised in Jackson Daily News, Jackson, MS on April 26, 1979.

0-30 days Contracts Awarded

At the end of the 30 days of advertising, all prospective buyers are required to submit a sealed bid along with a bid bond for consideration of the proposed sale. The bid bond is approximately 1 month's operation of the total appraised value of the sale. These bonds are returned upon the awarding of the contract to the high bidder. The district forest ranger or the forest supervisor opens the sealed bids and determines the high bidder, upon the apparent high bidders acceptance of the contract and collection of the performance bond by the purchaser, the contract is awarded.

Immediately after the contract is awarded, a preentry conference is conducted by the district forest ranger and the purchaser. During this conference specific details of the sale are covered including an order of entry or logging schedule submitted by the purchaser, which is a sequence in which he will log the sale by sale units. The following is a copy of the Pre-Entry Conference Checklist including the Logging Plan.

USDA FOREST SERVICE

PRE-ENTRY CONFERENCE CHECKLIST

AWARD DATE 6/5/79
SALE NAME Compartment 81
PURCHASER Malpus Lumber Co
CONTRACT NO. 205418
NATIONAL FOREST Bienville
RANGER DIST. Bienville
CONFERENCE DATE 6/11/79

INSTRUCTIONS:
1. Check (x) all applicable items.
2. Give Purchaser copy.
3. Place F.S. copy in Timber Sale Folder

I. ATTENDANCE 1/

☐ District Ranger
☒ Sale Administrator
John Leeves
☒ District TMA
John Fugway
☐ District Clerk
☐ Forest Engineer
☒ Timber Purchaser
Doug James
☒ Purchaser Representative
Carl Roland
☒ Contractor, Log
Billy Harelson
☐ Contractor, Road
☐

NOTES/REMARKS

II. CONTRACT DISCUSSION

☒ Marking/Measuring
☒ Superior Trees
☒ Entry/Billing
☒ Coop. Work
☒ Roads
☒ Operating Schedule
☒ Logging Plan
☒ Operating Season
☒ Safety
☒ Sanitation
☒ Supervision
☒ Logging
☒ Watershed Protection
☒ Slash Disposal
☒ Fire Control
☒ Adjustments
☒ Extensions
☒ Specific Clauses
☒ Suspension
☐
☐
☐
☐
☐
☐
☐

SIGNATURES

Doug James
(Purchaser)

Carl Roland
(Pur. Representative)

(District Ranger - USDA)

III. VISUAL AIDS

☒ Sale Area Map
☒ Purchaser Copy
☒ Map Discussion

** Slides **

☐ Roads
☐ Cutting
☐ Logging
☐ Watershed Protection
☐ Loading Areas
☐
☐
☐

IV. FIELD REVIEW

☐ Yes ☒ No

NOTES/REMARKS

IMPORTANT: ATTACH A DETAILED SUMMARY OF DISCUSSIONS WHICH WERE EMPHASIZED, OR WHERE POTENTIAL CONTROVERSY MIGHT ARISE.

1/ WRITE NAME UNDER TITLE.

R8 2400-22 (11/71)

LOGGING PLAN

INSTRUCTIONS:
1. COMPLETE ALL ITEMS.
2. GIVE PURCHASER ONE COPY.
3. PLACE F.S. COPY IN SALE FOLDER.

1. DATE TO BEGIN ROAD CONSTRUCTION: 6-30-79
2. DATE TO BEGIN LOGGING OPERATIONS: 6-14-79

3. LOGGING/EQUIPMENT ON SALE:

COMPANY		CONTRACT
	NO. OF MEN	6
	NO. OF CREWS	1
	POWER SAWS	2
	TRACTORS	—
	SKIDDERS	2-CAT-518
	LOADER(S)	1-CAT-920
	HAUL TRUCKS	2-T/L trucks
	HORSES	

4. EXPECTED WEEKLY PRODUCTION: 85 (MBF)
50 (CORDS)

5. ORDER OF ENTRY SCHEDULE (TENTATIVE)

UNIT NO.	VOLUME		DATE RELEASED	DATE CUT	REMARKS
	CORDS	MBF			
12			Summer, 1979		
8					
6					
10					
4					
9					
2			Summer, 1980		
7					
11					
3					

Sale units or payment units are administrative units designed to contain the same approximate volume, enabling the purchaser to spread his payments over similar increments.

Prior to any logging operations being conducted, the purchaser must pay in full for the sales unit he intends to begin logging. He may pay for as many of these as he so desires at once, but can only begin logging operations after he has paid for the particular sales unit. The following is an example of Payment Unit Release.

DA - FOREST SERVICE PAYMENT UNIT RELEASE Tree Measurement Payment Unit Sale	NATIONAL FOREST (2) Bienville RANGER DISTRICT (3) Bienville	DATE RELEASED (23) 10-24-80
STRUCTIONS: *See FSM 2493. Prepare in triplicate.* iginal to purchaser, copy to Supervisor and Ranger. Numbers ( ) refer to form 2400-20T Timber Sale Synopsis & Check st	CONTRACT NUMBER (4a) 005418	DATE OF SALE (4) 06-05-79
AME AND ADDRESS OF PURCHASER (1) Molpus Lumber Co Box 59 Philadelphia, MS 39350	NAME OF SALE (10) Compartment 81	

he timber included in the following payment unit(s) is released to the purchaser for cutting as of the date shown above.

PAYMENT UNIT NUMBER (23G)	DATE OF PAYMENT*	NUMBER OF PAYMENT*	AMOUNT OF PAYMENT*
7(Additional Timber)	Cash Balance	Applied	$265.30 ✓

**From Bill for Collection (6500-89)*

REMARKS:

SIGNATURE OF FOREST SERVICE REPRESENTATIVE

TITLE
TMA

+1 year Road Construction

During this time frame the road construction is begun, and hopefully completed. If the purchaser is considered under the FS's Small Business Administration's Set-Aside Program (program in which a portion of timber sales on a particular forest are set-aside for small business operators, i.e., operators with less than 499. employees). The operator may opt to have the FS build the road under a public works contract. The advertising and awarding of the public works contract usually delays construction an additional 120 days.

+2 to 3 year Logging Operations

The purchaser begins logging operations. Region 8 sales are usually short term in length, but may be extended due to unforeseeable weather and justifiable requests by the purchaser. An FS sales administrator ensures the purchaser only takes the marked trees he has paid for.

+3 to 4 year Site Preparation and Reforestation

The sales area is prepared for planting, which is generally referred to as site preparation. The seedlings are then planted generally the same year the site is prepared or the following year, depending upon the scheduling of the site preparations with regard to the time of year logging operations are concluded. Reforestation is a 3 to 4 year planning process, which is discussed in detail earlier in this report.

+5 to 7 year Check of Reforestation Success

Annual checks are conducted.

The above gate system is a general model utilized in Region 8 for both clearcutting of mature compartments, as well as precommercial thinning operations which are done approximately every 15 years of the stands age. Precommercial thinning is done to maximize the growth of the eventual mature trees and brings in continual revenues through the demand for small timber which is utilized by the pulpwood industry. Region 8 is presently moving into "second generation forests," and due to genetic improvements expects to reduce the maturation time from 50 years to 35-40 years in the near future.

USDA - FOREST SERVICE

REPORT OF TIMBER SALE
CONVERTIBLE AND NONCONVERTIBLE PRODUCTS
(REF. FSM 2400)

REGION 06
STATE 53
ACRES IN SALE 351
BID DATE 11/ 10/ 81/
SALVAGE Y
CONT. NO. 06101-1

FOREST GIFFORD PINCHOT 03
COUNTY 59
STATUS 1
PRICING METHOD 1
CONTRACT FORM 2400 6

DISTRICT (OR AREA) 01
ST. HELENS
SALE NAME VIS-RIDGE
LEGAL DESCRIPTION T9N,R6E,WMS
SALE NUMBER 005
SBA SET-ASIDE N
PLAN'D SAD COL. $ 26,650
CONTRACTING OFFICER S

APP. BASE PERIOD 6-81
TERM. DATE 08/ 31/ 83/
METHOD OF SALE A

QTR.-FY 1-82
COMPARTMENT 1305
ZONE 2
CONTRACT DATE 11/24/81
REG. 6

SPECIES	SPEC CODE	PROD. UNIT	VOLUME	ADVERTISED RATES $	STAT. HIGH BID $	HIGH BIDDER $	2ND HIGH BIDDER $	3RD HIGH BIDDER $	4TH HIGH BIDDER $	5TH HIGH BIDDER $	6TH HIGH BIDDER $	7TH HIGH BIDDER $	8TH HIGH BIDDER $	9TH HIGH BIDDER $	10TH HIGH BIDDER $	11TH HIGH BIDDER $	12TH HIGH BIDDER $
D	205	1-1	5,200	3.00	272.00	272.00	177.90	5.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00		
C	242	1-1	300	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00		
HRO	263	1-1	8,800	2.00	2.00	2.00	58.00	2.00	2.05	2.00	2.00	2.00	2.00	2.00	2.00		
*PAM	002	4-1	3,600	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50		
TOTAL/AVER.		1	17,900	1.99	80.13	80.13											

SUMMARY OF BIDDERS

RANK	NAME	SBA CLASS	IDENTIFICATION NUMBER	TOTAL VALUE OF BID
HIGH 1	Wilkins, Kaiser & Olsen	S		1,434,400.00
2	Bald Knob Land & Tbr.	N		1,433,200.00
3	Claussen Tbr. Prod.	N		46,000.00
4	Vanport Mfg.	S		36,040.00
5	Latimer & Sons	N		35,600.00
6	Pacific Lbr. Sales	S		35,600.00
7	S.D.S. Lbr. Co.	S		35,600.00
8	Stevenson Co-Ply	S		35,600.00
9	Brazier Forest Prod.	S		35,600.00
10	Fort Vancouver Ply.	S		35,600.00
11				
12				

DISTRIBUTION: Orig. and 1cc to RO (orig. to WO), 1cc to RO of SBA

I certify that I have personally examined the Bids submitted for this sale and that this is an accurate record thereof.

Signature Loretta Lowe
TITLE Supervisory Resource Technician
DATE 11/18/81

REMARKS

SPECIES	2S	3S	4S	1P	2P	3P
D	55	19	--	1	4	21
C	12	87	1	--	--	--
A	55	45	--	--	--	--
H	52	47	--	1	--	--

*PAM sold at the rate of $6.29 per acre for 286 acres; per M figures for statistical purposes only.
** HRO verbal clearance given.

Page 1

R6 Interim 2400-17 (9/81)

786

786

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L.(  92)                                A P P R A I S A L   S U M M A R Y

 SALE NAME: VTS-RIDGE                                         SUMMARY CHECKED BY:  V. Boyer          DATE: 10/01/81
------------------------------------------------------ CARD TYPE 5 ---------------------------------------------------------
                  SPECIFIED RD CONST (MILES)   .0   RECONSTRUCTION (MILES)   .0   PUNCH CR LIN $      0  (INC. 7      0 P&R **)
                                          (17-19)                      (20-22)                   (23-29)
 PRODUCT:  APPRAISED TO:          HAUL (MILES)   41   TEMP RD CONSTR (MILES)  1.3   TEMP RD COST $  44091
   1       RANDLE WA                      (33-35)                      (30-32) '                 (36-42)
   4       CANAS WA                   BASIC DATA PERIOD: C.Y.1979R
                              ADJ TO APPR BASE PERIOD: LBR: IC 2ND QTR 81,ALL OTHR AUG 81 COMP   PLY: JUN, JUL, AUG 81
---------------------------------------- CARD TYPE 6 ----------------------------------------:---- CARD TYPE 7 ----------------
 1 PRODUCT/UNIT                          (14-15)   1-1     1-1     1-1              4-1     : UNIT OF MEASURE: 1 (16)
 2 SPECIES                                          D       C      M&O              PAM*    :
 3 SPECIES CODE                          (16-18)   205     242     263              802     :(T) TOTAL OR (A) AVERAGE:
 4 % BY SPECIES                                  29.056  1.685  49.168           20.118     : T       100.0 %
 5 VOLUME                                (19-25)   5200     300    8000             3600     : T        17900 (17-23)
 6 SELLING VALUE                                 547.70  471.97  297.91           262.69     : A       366.33
 7 ADJ FACTOR SCH 1008                             0.984   1.000   0.992                    :
 8 ADJ SELLING VALUE                             539.02  471.97  295.53           262.69     :
 9 CHIP & BYPRODUCTS                              36.66    0.00   43.23             0.00     :
10 SELLING VALUE L.S.                    (26-31) 575.68  471.97  338.76           262.69     : A       394.52
11 FALLING & BUCKING                              19.85   19.85   19.85             5.49     : A        16.96 (24-28)
12 SKIDDING                                       41.02   41.02   41.02            27.90     : A        30.30 (29-33)
13 LOADING                                        10.48   10.48   10.48             0.17     : A        10.02 (34-38)
14 SUBTOTAL, STUMP-TO-TRUCK                       71.35   71.35   71.35            41.56     :
15 HAUL AND SCALE                                 55.00   55.00   55.00            30.00     : A        52.40 (39-42)
16 ROAD MAINTENANCE INC $23.26 CO-OP              25.21   25.21   25.21             0.00     : A        20.14 (43-46)
17 SUBTOTAL, TRANSPORTATION                       81.01   81.01   81.01            30.00     :
18 GENERAL LOGGING OVERHEAD                       18.26   18.26   18.26            13.05     : A        17.37 (47-50)
19 LOGGING DEPRECIATION                           10.09   10.09   10.09             0.16     : A         9.70 (51-54)
20 SUBTOTAL, ADMINISTRATIVE                       28.35   28.35   28.35            22.01     :
21 SLASH DISPOSAL (INC.   2.24 CO-OP)              8.06    8.06    8.06             0.00     : A         6.44 (55-58)
22 EROSION CONTROL                                 0.72    0.72    0.72             0.00     : A          .50 (59-62)
23 SNAG DISPOSAL                                   0.00    0.00    0.00             0.00     : A          .00 (63-66)
24 INC FIRE PROTECTION                             0.68    0.68    0.68             0.53     : A          .65 (67-70)
25 SUBTOTAL, ENVIRONMENTAL PROTECTION              9.46    9.46    9.46             0.53     :
26 TEMPORARY ROADS                                 3.08    3.08    3.08             0.00     : A         2.46 (71-74)
27 OTHER TEMPORARY DEVELOPMENTS                    0.03    0.03    0.03             0.00     : A          .02 (75-78)
28 SUBTOTAL,TEMPORARY DEVELOPMENT                  3.11    3.11    3.11             0.00     :
29 SUBTOTAL, LOGGING COSTS               (32-36) 193.20  193.20  193.20           102.98     : A       175.12
30 SPECIFIED ROAD COST (A10)                       0.00    0.00    0.00             0.00     : A          .00
31 TOTAL LOGGING COST L.S.                       193.20  193.20  193.20           102.98     : A       175.12
32 MFG. COST L.S.                                221.28  155.78  157.60           140.95     : A       174.33
33 PRODUCT HAUL                                    7.76    6.23    6.90             0.00     : A         5.79
34 MFG. COST L.S.                        (37-41) 229.04  162.01  164.50           140.95     : A       180.12
35 TOTAL PRODUCTION COST L.S.                    422.32  355.29  357.86           251.93     : A       355.24
36 CONVERSION (10)-(35)                          153.36  116.68  -19.10            10.76     : A        39.28
37 P&R RATIO % NORMAL/ADVERTISED                  14.00   14.00   14.00            14.00     : NORM   14.0  ADV  10.4 **
38 P&R MARGIN NORMAL/ADVERTISED                   70.81   58.05   41.67            32.31     : NORM  48.53  ADV 37.29 **
39 INDICATED NET STUMPAGE (36)-(38)               82.55   58.63  -60.77           -21.55     : A        -9.25
40 INDICATED ADVERTISED RATES (39)+(38)           82.55   58.63  -60.77           -21.55     : T  -165507.00
                                                                                            : A        -9.24
41 BASE RATES                                      3.00    2.00    2.00             0.50     : A         1.99
42 ADJUSTMENTS TO BASE RATES              [illegible] [illegible] 62.77            22.05     : A        11.24
43 ADVERTISED RATES (40)+(42)            (42-46)   3.00    2.00    2.00             0.50     : T     35600.00
                                                                                            : A         1.99
44 INDICATED STAT NET RATES(43)-(38)               3.00    2.00    2.00             0.50     : A         1.99
45 APPRAISED NET RATES                   (47-51)   3.00    2.00    2.00             0.50     : A         1.99
46 BASE INDICES                                    0.00    0.00    0.00             0.00     :
* PAM*  ACTUALLY APPRAISED AT $    6.29/ACRE FOR     286 ACRES.
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USDA - FOREST SERVICE

REPORT OF TIMBER SALE

(REF. FSM 2490)

REGION	0 6	FOREST GIFFORD PINCHOT	0 3	DISTRICT (OR AREA) Randle	0 5
STATE	5 3	COUNTY	0 5 9	SALE NAME	VTS-BISMARCK-BEECH
ACRES IN SALE	464			SALE NUMBER	0 5 7
				LEGAL DESCRIPTION	S15,16,21,22,T[illegible]
BID DATE	07/23/81	STATUS	1	SBA SET-ASIDE	N
SALVAGE	N	PRICING METHOD	1	PLAN'D SAB COL. $	189,343
CONT. NO.	068222	CONTRACT FORM 2400	6	CONTRACTING OFFICER	S

QTR.-FY	4 - 8 1	COMPARTMENT	5 2 0 6
APP. BASE PERIOD	1 - 8 1	ZONE	2
TERM. DATE	03/31/83	CONTRACT DATE	08/25/81
METHOD OF SALE	A	REG. [illegible]	6

SPECIES	SPEC. CODE	PROD. UNIT	VOLUME	ADVERTISED RATES $	STAT. HIGH BID $	HIGH BIDDER $	2ND HIGH BIDDER $	3RD HIGH BIDDER $	4TH HIGH BIDDER $	5TH HIGH BIDDER $	6TH HIGH BIDDER $	7TH HIGH BIDDER $	8TH HIGH BIDDER $	9TH HIGH BIDDER $	10TH HIGH BIDDER $	11TH HIGH BIDDER $	12TH HIGH BIDDER $
D	205	1-1	4,600	3.00	166.00	166.00	59.20	29.00	5.50	65.00	3.00	3.25					
IWO	263	1-1	10,100	2.04	95.00	95.00	162.30	115.00	111.75	75.00	2.50	2.25					
*PAH	002	1-1	1,400	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50					
					1714600.00												
TOTAL/AVER.		1	16,100	2.18	106.50	106.50											

SUMMARY OF BIDDERS

RANK	NAME	SBA CLASS	IDENTIFICATION NUMBER	TOTAL VALUE OF BID
HIGH 1	Tengfeldt Wood Prod.	S		$1,714,600.00
2	Brazier Forest Prod.	S		1,710,250.00
3	Latimer & Sons	N		1,295,600.00
4	Pacific Lbr. Sales	S		1,154,675.00
5	Champion Int.	L		1,052,200.00
6	Bald Knob Land & Tbr.	N		39,750.00
7	Mt. Adams Veneer	L		38,375.00
8				
9				
10				
11				
12				

DISTRIBUTION: Orig. and 1cc to RO (orig. to WO), 1cc to RO of SBA

I certify that I have personally examined the Bids submitted for this sale and that this is an accurate record thereof.

SIGNATURE

TITLE BMA

DATE 7/28/81

REMARKS Pending Financial Report.
Verbal EEO Clearance 7/27/81 **

SPECIES	2P	3P	SP	2S	3S
D	3	40	7	34	16
IWO	--	--	--	50	50

*PAH sold at the rate of $1.51 per acre for 464 acres; per M figures for statistical purpose only.

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L.I 301                         A P P R A I S A L   S U M M A R Y

SALE NAME: WINDNICK-BEECH                              SUMMARY CHECKED BY:  T. [illegible]       DATE: 04/11/81
                 - - - - - - - - - - - - - - - - - - - CARD TYPE 5 - - - - - - - - - - - - - - - - - - - - -
SPECIFIED RD. CONST (MILES)    .0            RECONSTRUCTION (MILES)   .0   PURCH.CR.LIM $      0  (INC. $      0 PAR 99)
                          14-16                                     17-19                     20-26
PAYMENT:  APPRAISED TO:    HAUL MILES:  31  TEMP RD CONSTR (MILES)  4.7  TEMP RD COST $ 152104
   1        RANDLE WASH                30-32                        27-29  ADJ TO   (APPRAISAL BASE PERIOD):
   4        TACOMA WASH                    BASIC DATA PERIOD:C.Y.1973A  LUM: 1ST QTR 81 ALL
                                                                           PLY: 1ST QTR 81 ALL
                                      ==================== CARD TYPE 6 ====================    UNIT OF MEASURE
 1 PRODUCT/UNIT                          14-15   1-1     1-1                      4-1                  1    33
 2 SPECIES                                        D      W-H                      PAR         TOTAL OR AVERAGE
 3 SPECIES CODE                          16-18   205     263                      002
 4 % BY SPECIES                                 28.53%  63.73%                    8.30%   T       100.0 %
 5 VOLUME                                19-25   4600   10100                     1400    T       16100 34-40
 6 SELLING VALUE                                524.12  316.50                   260.82   A      371.00
 7 ADJ FACT (SCHED 9601)                         0.991   1.005
 8 ADJ SELLING VALUE                            519.60  318.16                   260.82
 9 CHIP & BYPRODUCTS                             36.66   42.71                     0.00
10 SELLING VALUE L.S.                    26-30  556.26  360.87                   260.82   A      408.00
11 FALLING & BUCKING                             21.03   21.03                     7.13   A       19.02 41-44
12 YARDING & LOADING                             49.00   49.00                    39.86   A       46.71 45-48
13
14 SUBTOTAL, STUMP-TO-TRUCK                      70.03   70.03                    46.99
15 HAUL AND SCALE                                31.09   31.09                    53.90   A       33.00 49-52
16 ROAD MAINTENANCE INC $17.86 CO-OP             19.02   19.02                     0.00   A       17.37 53-56
17 SUBTOTAL, TRANSPORTATION                      50.11   50.11                    53.90
18 GENERAL LOGGING OVERHEAD & DEPREC              9.19    9.19                     7.90   A        9.09 57-60
19 (DEPRECIATION INCLUDED IN LINE 18)          ( 6.15)( 6.15)                   ( 5.32)
20 SUBTOTAL, ADMINISTRATIVE                       9.19    9.19                     1.50
21 SLASH DISPOSAL (INC.  11.40 CO-OP)            36.67   36.67                     0.00   A       33.40 61-64
22 EROSION CONTROL                                5.20    5.20                     0.00   A        4.82 65-68
23 SNAG DISPOSAL                                  0.00    0.00                     0.00   A         .00 69-72
24 FIRE & OTHER                                   1.00    1.00                     0.50   A         .96 73-76
25 SUBTOTAL, ENVIRONMENTAL PROTECTION            42.95   42.95                     0.50
26 TEMPORARY ROADS & OTHER TEMP DEVELOPMTS       10.35   10.35                     0.00   A        9.45 77-80
27 (OTHER TEMPORARY DEVELOPMENTS)              ( 0.00)( 0.00)                   ( 0.00)  A      (   .00)
28 SUBTOTAL, TEMPORARY DEVELOPMENT               10.35   10.35                     0.00
29 SUBTOTAL, LOGGING COSTS               31-35  182.63  182.63                   109.45   A      176.27
30 SPECIFIED ROAD COST (AIR)                      0.00    0.00                     0.00   A         .00
31 TOTAL LOGGING COST L.S.                      182.63  182.63                   109.45   A      176.27
32 MFG. COST L.S.                               220.55  166.07                   141.57   A      179.51
33 PRODUCT HAUL                                   7.46    7.31                     0.00   A        6.72
34 MFG. COST L.S.                        36-40  228.01  173.38                   141.57   A      186.22
35 TOTAL PRODUCTION COST L.S.                   410.64  356.01                   251.02   A      362.49
36 CONVERSION ((10)-(35))                       145.62    4.86                     9.80   A       45.51
37 P&R RATIO % NORMAL/ADVERTISED                 14.00   14.00                    14.00 NORM  14.0  ADV  31.9 **
38 P&R MARGIN NORMAL/ADVERTISED                  68.42   44.39                    32.00 NORM 50.19  ADV 63.33 **
39 INDICATED NET STUMPAGE (36)-(38)              77.20  -39.53                   -22.20   A       -4.60
40 INDICATED ADVERTISED RATES (39)+(30)          77.20  -39.53                   -22.20   T   -35324.93
                                                                                          A       -4.67
41 BASE RATES                                     3.00    2.04                     0.50   A        2.14
42 ADJUSTMENTS TO BASE RATES                    -74.20   41.57                    22.70   A        6.06
43 ADVERTISED RATES (41)+(42)            41-45    3.00    2.04                     0.50   T    35104.00
                                                                                          A        2.10
44 INDICATED STAT NET RATE((43)-(30))             3.00    2.04                     0.50   A        2.10
45 APPRAISED NET RATES                   46-50    3.00    2.04                     0.50   A        2.10   35,104
   HAUL    MCS                                     0.__    0.__                     0.0_
 * PAR ACTUALLY APPRAISED AT $  1.51/ACRE FOR     464 ACRES.
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USDA - FOREST SERVICE

REPORT OF TIMBER SALE
CONVERTIBLE AND NONCONVERTIBLE PRODUCTS
(REF. FSM 2490)

REGION	0 6	FOREST Gifford Pinchot	0 3	DISTRICT (OR AREA) St. Helens	0 1
STATE	5 3	COUNTY	0 5 9	SALE NUMBER	0 0 6
ACRES IN SALE	408			SALE NAME	VTS-VERTIGO
				LEGAL DESCRIPTION	T9N,R6E,S27,28,34,WM
BID DATE	11/25/81	STATUS	4	SBA SET-ASIDE	N
SALVAGE	Y	PRICING METHOD	1	PLAN'D SAB COL. $	114,720
CONT. NO.	06102-9	CONTRACT FORM 2400	6	CONTRACTING OFFICER	S

QTR.-FY	1 - 82	COMPARTMENT	1 3 0 5
APP. BASE PERIOD	6 - 8 1	TERM. DATE	10/31/83
METHOD OF SALE	A	ZONE	2
CONTRACT DATE	/ /	REG. MCFR	6

SPECIES	SPEC. CODE	PROD. UNIT	VOLUME	ADVERTISED RATES $	STAT. HIGH BID $	HIGH BIDDER $	2ND HIGH BIDDER $	3RD HIGH BIDDER $	4TH HIGH BIDDER $	5TH HIGH BIDDER $	6TH HIGH BIDDER $	7TH HIGH BIDDER $	8TH HIGH BIDDER $	9TH HIGH BIDDER $	10TH HIGH BIDDER $	11TH HIGH BIDDER $	12TH HIGH BIDDER $
D	205	1-1	7,600	11.64	18.00	18.00	76.00	100.00	12.00	11.64	11.64	11.64	11.64	11.64			
C	242	1-1	700	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00			
HMO	263	1-1	8,500	2.00	130.00	130.00	77.00	2.00	75.00	2.00	2.00	2.00	2.00	2.00			
*PAM	002	4-1	3,200	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58	5.58			
TOTAL/AVER.		1	20,000	6.24	63.05	63.05											

SUMMARY OF BIDDERS

RANK	NAME	SBA CLASS	IDENTIFICATION NUMBER	TOTAL VALUE OF BID
HGH 1	Claussen Timber Prod.	N		1,261,056.00
2	Bald Knob Land & Tbr.	N		1,251,356.00
3	Wilkins, Kaiser & Olsen	S		796,256.00
4	Vanport Manufacturing	S		747,956.00
5	Fort Vancouver	S		124,720.00
6	Latimer & Sons	N		124,720.00
7	Pacific Lumber Sales	S		124,720.00
8	S.D.S. Tbr.	S		124,729.00
9	Stevenson Co-Ply	S		124,720.00
10				124,720.00
11				
12				

DISTRIBUTION: Orig. and 1cc to RO (orig. to WO), 1cc to RO of SBA

I certify that I have personally examined the Bids submitted for this sale and that this is an accurate record thereof.

Signature Lorella Love

TITLE Supervisory Resource Technician

DATE 11/25/81

REMARKS Verbal EEO clearance given 11/25/81
Financial Report Requested

SPECIES	2S	3S	4S	1P	2P	3P	SP
D	53	19	--	1	4	22	1
C	21	79	--	--	--	--	--
H	59	41	--	--	--	--	--
A	58	42	--	--	--	--	--
WP	96	--	4	--	--	--	--

*PAM sold at the rate of $49.19 per acre for 363 acres; Per M figures for statistical purposes only.

R6 Interim 2400-17 (10/81)

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790

790

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L.( 106)                        A P P R A I S A L   S U M M A R Y

  SALE NAME: VTS VERTIGO                                   SUMMARY CHECKED BY: Y. Boyer        DATE: 10/15/81
 ------------------------------------------------- CARD TYPE 5 ---------------------------------------------------
                 SPECIFIED RD CONST (MILES)  .0   RECONSTRUCTION (MILES)  .0   PURCH CR LIM $      0  (INC. $      0 P&R **)
                                           (17-19)                     (20-22)                  (23-29)
  PRODUCT:  APPRAISED TO:          HAUL (MILES)  50   TEMP RD CONSTR (MILES)  1.0   TEMP RD COST $  22982
     1      RANDLE WA                       (33-35)                     (30-32)                  (36-42)
     4      TACOMA WA                BASIC DATA PERIOD: C.Y.1979R
     0                   ADJ TO APPR BASE PERIOD: LAR; IC 2ND QTR 81,ALL OTHR AUG 81 COMP   PLY: JUN, JUL, AUG 81
 ---------------------------------------- CARD TYPE 6 ----------------------------------------|--- CARD TYPE 7 -----------------.
 1 PRODUCT/UNIT                          (14-15)    1-1     1-1     1-1                4-1   : UNIT OF MEASURE: 1 (16)
 2 SPECIES                                           D       C      H&O               PAH*   :
 3 SPECIES CODE                          (16-18)    202     242     263                802   :(T) TOTAL OR (A) AVERAGE:
 4 % BY SPECIES                                   38.00%  3.50%  42.50%            16.00%   : T        100.0 %
 5 VOLUME                                (19-25)    7600     700    8500               3200   : T         20000 (17-23)
 6 SELLING VALUE                                  542.24  470.03  303.05             253.76   : A        392.18
 7 ADJ FACTOR SCURU 1981                           0.984   1.000   0.992                      :
 8 ADJ SELLING VALUE                              533.56  470.03  300.63             253.76   :
 9 CHIP & BYPRODUCTS                               36.66    0.00   43.18               0.00   :
10 SELLING VALUE L.S.                    (26-31)  570.22  470.03  343.81             253.76   : A        420.14
11 FALLING & BUCKING                               21.75   21.75   21.75               0.00   : A         18.27 (24-28)
12 SKIDDING                                        38.04   38.04   38.04               0.00   : A         31.95 (29-33)
13 LOADING                                         11.44   11.44   11.44               0.92   : A         11.04 (34-38)
14 SUBTOTAL, STUMP-TO-TRUCK                        71.23   71.23   71.23               0.92   :
15 HAUL                                            51.58   51.58   51.58              65.32   : A         53.78 (39-42)
16 ROAD MAINTENANCE FS CO-OP DEP 28.59             30.51   30.51   30.51               0.00   : A         25.63 (43-46)
17 SUBTOTAL, TRANSPORTATION                        82.09   82.09   82.09              65.32   :
18 GENERAL LOGGING OVERHEAD                        18.26   18.26   18.26               1.35   : A         15.55 (47-50)
19 LOGGING DEPRECIATION                             6.06    6.06    6.06               1.31   : A          5.38 (51-54)
20 SUBTOTAL, ADMINISTRATIVE                        24.32   24.32   24.32               2.66   :
21 SLASH DISPOSAL (INC.    2.33 CO-OP)             17.46   17.46   17.46               0.00   : A         14.67 (55-58)
22 EROSION CONTROL                                  2.35    2.35    2.35               0.00   : A          1.97 (59-62)
23 SNAG DISPOSAL                                    0.00    0.00    0.00               0.00   : A           .00 (63-66)
24 MISC INCL FIRE PROT                              0.68    0.68    0.68               0.53   : A           .66 (67-70)
25 SUBTOTAL, ENVIRONMENTAL PROTECTION              20.49   20.49   20.49               0.53   :
26 TEMPORARY ROADS                                  1.37    1.37    1.37               0.00   : A          1.15 (71-74)
27 OTHER TEMPORARY DEVELOPMENT*                     0.09    0.09    0.09               0.00   : A           .08 (75-78)
28 SUBTOTAL,TEMPORARY DEVELOPMENT                   1.46    1.46    1.46               0.00   :
29 SUBTOTAL, LOGGING COSTS              (32-36)  199.59  199.59  199.59              77.43   : A        180.05
30 SPECIFIED ROAD COST (A10)                        0.00    0.00    0.00               0.00   : A           .00
31 TOTAL LOGGING COST L.S.                        199.59  199.59  199.59              77.43   : A        180.05
32 MFG. COST L.S.                                 220.37  155.78  159.74             141.57   : A        179.73
33 PRODUCT HAUL                                     6.94    6.19    6.94               0.00   : A          5.80
34 MFG. COST L.S.                       (37-41)  227.31  161.97  166.68             141.57   : A        185.54
35 TOTAL PRODUCTION COST L.S.                     426.90  361.56  366.27             219.00   : A        365.59
36 CONVERSION (10)-(35)                           143.32  108.47  -22.46              34.76   : A         54.55
37 P&R RATIO % NORMAL/ADVERTISED                   13.00   13.00   13.00              13.00   : NORM  13.0   ADV  13.0 **
38 P&R MARGIN NORMAL/ADVERTISED                    65.58   46.97   39.54              29.18   : NORM 40.32   ADV 40.32 **
39 INDICATED NET STUMPAGE (36)-(38)                77.74   61.50  -60.00               5.58   : A          6.24
40 INDICATED ADVERTISED RATES (39)+(38)            77.74   61.50  -62.00               5.58   : T     124729.99
                                                                                              : A          6.24
41 BASE RATES                                       3.00    2.00    2.00               0.50   : A          2.14
42 ADJUSTMENTS TO BASE RATES                      -66.10  -59.50   64.00               0.00   : A           .00
43 ADVERTISED RATES (40)+(42)           (42-46)   11.64    2.00    2.00               5.58   : T     124720.00
                                                                                              : A          6.24
44 INDICATED STAT NET RATES(43)-(38)               11.64    2.00    2.00               5.58   : A          6.24
45 APPRAISED NET RATES                  (47-51)   11.64    2.00    2.00               5.58   : A          6.24
46 BASE INDICES                                     0.00    0.00    0.00               0.00   :
* PAH*  ACTUALLY APPRAISED AT $  49.19/ACRE FOR     363 ACRES.
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USDA - FOREST SERVICE

REPORT OF TIMBER SALE
CONVERTIBLE AND NONCONVERTIBLE PRODUCTS
(REF. FSH 2490)

REGION 0 6
STATE 5 3
ACRES IN SALE 241
FOREST Gifford Pinchot 0 3
COUNTY 0 5 9
DISTRICT (OR AREA) 0 1 St. Helens
SALE NUMBER 0 0 4
SALE NAME VTS-FALLS
LEGAL DESCRIPTION T9NR6E,S23,24,25,26,WMS
QTR.-FY 1 - 8 2
COMPARTMENT 1 3 0 5
BID DATE MO. 11/ DAY 04/ YR. 81/
STATUS ** 9
PRICING METHOD 1
CONTRACT FORM 2400 6
SBA SET-ASIDE N
PLAN'D SAD COL $ 240,425
CONTRACTING OFFICER S
APP. BASE PERIOD 7 - 8 1
TERM. DATE 08/ 31/ 83/
METHOD OF SALE A
ZONE 2
CONTRACT DATE __/ __/ __/
REG. 36CFR221 6
SALVAGE Y
CONT. NO. 06100-3

SPECIES	SPEC. CODE	PROD. UNIT	VOLUME	ADVERTISED RATES $	STAT. HIGH BID $	HIGH BIDDER $	2ND HIGH BIDDER $	3RD HIGH BIDDER $	4TH HIGH BIDDER $	5TH HIGH BIDDER $	6TH HIGH BIDDER $	7TH HIGH BIDDER $	8TH HIGH BIDDER $	9TH HIGH BIDDER $	10TH HIGH BIDDER $	11TH HIGH BIDDER $	12TH HIGH BIDDER $
D	205	1-1	6,100	57.30	57.50	57.50	166.00	57.30	57.30	57.30	57.30	57.30	57.30	57.30	57.30	57.30	57.30
C	242	1-1	300	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25	9.25
HBO	263	1-1	6,600	2.00	140.00	140.00	35.00	120.00	7.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
*PAM	002	4-1	3,300	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50
TOTAL/AVER.		1	16,300	22.52	78.48	78.48											

SUMMARY OF BIDDERS

RANK	NAME	SBA CLASS	IDENTIFICATION NUMBER	TOTAL VALUE OF BID
HIGH 1	Astoria Plywood Corp.	S		1,279,175.00
2	Crown Zellerbach	L		1,248,025.00
3	Brazier Forest Prod.	S		1,145,955.00
4	Vanport Manufacturing	S		400,155.00
5	Columbia Vista	S		367,155.00
6	Bald Knob Land & Tbr.	N		367,155.00
7	Fort Vancouver	S		367,155.00
8	Latimer & Sons	N		367,155.00
9	S.D.S. Lumber Co.	S		367,155.00
10	Stevenson Co-Ply	S		367,155.00
11	Pacific Lumber Sales	S		367,155.00
12	Wilkins, Kaiser & Olsen	S		367,155.00

DISTRIBUTION: Orig. and 1cc to RO (orig. to WO), 1cc to RO of SBA

I certify that I have personally examined the Bids submitted for this sale and that this is an accurate record thereof.

Signature Loretta Lowe
TITLE Supervisory Resource Technician
DATE 11/4/81

REMARKS

SPECIES	2S	3S	2P	3P
D	37	19	11	33
C	14	86	--	--
H	25	75	--	--
A	54	46	--	--

Page 7

*PAM sold at the rate of $6.85 per acre for 241 acres; Per M figures for statistical purposes only.
** Award pending EEO clearance & Export Sub.

R6 Interim 2400-17 (9/81)

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L.( 106)                                   A P P R A I S A L   S U M M A R Y

 SALE NAME: VTS-FALLS                                                      SUMMARY CHECKED BY:  V. Boyer          DATE: 09/16/81
-------------------------------------------------------- CARD TYPE 5 -------------------------------------------------------------
                    SPECIFIED RD CONST (MILES)   .0   RECONSTRUCTION (MILES)   .0   PURCH CR LIM $      0  (INC. $       0 P&R **)
                                              (17-19)                       (20-22)                   (23-29)
 PRODUCT:  APPRAISED TO:           HAUL (MILES)   41   TEMP RD CONSTR (MILES)   .5   TEMP RD COST $  15900
    1         SANDLE                           (33-35)                       (30-32)                   (36-42)
    4         CAMAS                       BASIC DATA PERIOD: C.Y.1979R
                                   ADJ TO APPR BASE PERIOD: L&R: 2ND QTR 81 ALL                        FLT: 2ND QTR 81 ALL
-------------------------------------------- CARD TYPE 6 ----------------------------------------:--- CARD TYPE 7 ------------
 1 PRODUCT/UNIT                           (14-15)   1-1     1-1     1-1                  4-1      : UNIT OF MEASURE: 1 (16)
 2 SPECIES                                           DF      C      W&O                 PAM*      :
 3 SPECIES CODE                           (16-18)   205     242     263                  002      :(T) TOTAL OR (A) AVERAGE:
 4 % BY SPECIES                                   37.42%  1.84% 40.49%               20.25%      : T        100.0 %
 5 VOLUME                                 (19-25)   6100     300    6600                 3300      : T        16300 (17-23)
 6 SELLING VALUE                                  566.32  460.69  296.13               262.45      : A        353.46
 7 ADJ FACTOR BCASD 0881                           0.999   1.000   1.000                           :
 8 ADJ SELLING VALUE                              565.75  460.69  298.00               262.45      :
 9 CHIP & BYPRODUCTS                               36.66    0.00   43.23                 0.00      :
10 SELLING VALUE L.S.                     (26-31) 602.41  460.69  342.03               262.45      : A        425.69
11 FALLING & BUCKING                               25.53   25.53   25.53                 5.94      : A         31.56 (24-28)
12 SKIDDING                                        40.51   40.51   40.51                31.50      : A         38.69 (29-33)
13 LOADING                                         11.27   11.27   11.27                 9.70      : A         10.95 (34-38)
14 SUBTOTAL, STUMP-TO-TRUCK                        77.31   77.31   77.31                47.14      :
15 HAUL                                            45.83   45.83   45.83                30.27      : A         44.30 (39-42)
16 ROAD MAINTENANCE FS COOP DEP 23.44.             23.48   23.48   23.48                 0.00      : A         18.73 (43-46)
17 SUBTOTAL, TRANSPORTATION                        69.31   69.31   69.31                30.27      :
18 GENERAL LOGGING OVERHEAD                        18.26   18.26   18.26                14.44      : A         17.49 (47-50)
19 LOGGING DEPRECIATION                             9.26    9.26    9.26                 7.98      : A          9.00 (51-54)
20 SUBTOTAL, ADMINISTRATIVE                        27.52   27.52   27.52                22.42      :
21 SLASH DISPOSAL (INC.   2.10 CO-OP)               4.07    4.07    4.07                 0.00      : A          3.08 (55-58)
22 EROSION CONTROL                                  1.95    1.95    1.95                 0.00      : A          1.56 (59-62)
23 SNAG DISPOSAL                                    0.00    0.00    0.00                 0.00      : A           .00 (63-66)
24 MISC INCL FIRE PROT                              0.75    0.75    0.75                 0.50      : A           .72 (67-70)
25 SUBTOTAL, ENVIRONMENTAL PROTECTION               7.57    7.57    7.57                 0.50      :
26 TEMPORARY ROADS                                  1.23    1.23    1.23                 0.00      : A           .98 (71-74)
27 OTHER TEMPORARY DEVELOPMENTS                     0.00    0.00    0.00                 0.00      : A           .00 (75-78)
28 SUBTOTAL,TEMPORARY DEVELOPMENT                   1.23    1.23    1.23                 0.00      :
29 SUBTOTAL, LOGGING COSTS                (32-36) 102.94  102.94  102.94               108.41      : A        167.66
30 SPECIFIED ROAD COST (A10)                        0.00    0.00    0.00                 0.00      : A           .00
31 TOTAL LOGGING COST L.S.                        102.94  102.94  102.94               108.41      : A        167.66
32 MFG. COST L.S.                                 224.24  155.70  163.04               140.95      : A        183.28
33 PRODUCT HAUL                                     6.63    5.07    6.65                 0.00      : A          5.28
34 MFG. COST L.S.                         (37-41) 230.87  161.65  170.69               140.95      : A        188.56
35 TOTAL PRODUCTION COST L.S.                     413.81  344.59  353.43               257.36      : A        356.42
36 CONVERSION (10)-(35)                           188.60  124.10  -11.40                 5.09      : A         69.28
37 P&R RATIO % NORMAL/ADVERTISED                   14.00   14.00   14.00                14.00      : NORM  14.0  ADV  12.3 **
38 P&R MARGIN NORMAL/ADVERTISED                    74.10   57.65   42.07                33.20      : NORM 53.36  ADV 46.36 **
39 INDICATED NET STUMPAGE (36)-(38)               114.50   66.45  -53.47               -27.19      : A         16.92
40 INDICATED ADVERTISED RATES (39)+(38)           114.50   66.45  -53.47               -27.19      : T     275756.00
                                                                                                   : A         16.92
41 BASE RATES                                       3.00    2.00    2.00                 0.50      : A          2.07
42 ADJUSTMENTS TO BASE RATES                      -57.28  -57.20   55.47                27.69      : A          5.61
43 ADVERTISED RATES (40)+(42)             (42-46)  57.30    9.25    2.00                 0.50      : T     367155.00
                                                                                                   : A         22.52
44 INDICATED STAT NET RATES(43)-(38)               57.30    9.25    2.00                 0.50      : A         22.53
45 ADJUSTED NET RATES                     (47-51)  57.30    9.25    2.00                 0.50      : A         22.52
46 BASE INDICES                                      .30      .0       0
* PAM*  ACTUALLY APPRAISED AT $   6.85/ACRE FOR     241 ACRES.
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USDA - FOREST SERVICE

REPORT OF TIMBER SALE
CONVERTIBLE AND NONCONVERTIBLE PRODUCTS
(REF. FSM 2490)

REGION 0 6
STATE 5 3
ACRES IN SALE 142
BID DATE MO. 07/ DAY 01/ YR. 81/
SALVAGE Y
CONT. NO. 06087-2

FOREST Gifford Pinchot 0 3
COUNTY 0 5 9
STATUS I
PRICING METHOD J
CONTRACT FORM 2400 6 _

DISTRICT (OR AREA) St. Helens 0 1
SALE NUMBER 0 4 5
SALE NAME VTS-PARADISE II
LEGAL DISCRIPTION S.24,25, T. 9 N., R6E
SBA SET-ASIDE N
PLAN'D SAB COL $ 176,876
CONTRACTING OFFICER S

QTR.FY 4 QTR. - 81 YEAR
COMPARTMENT 1 3 0 5

APP. BASE PERIOD 1 - 8 1
TERM. DATE 04 / 30 / 82/
METHOD OF SALE A

ZONE 2
CONTRACT DATE 07 / 01/ 81/
REG. 36CFR221 6 _

SPECIES	SPEC. CODE	PROD. UNIT	VOLUME	ADVERTISED RATES $	STAT. HIGH BID $	HIGH BIDDER $	2ND HIGH BIDDER $	3RD HIGH BIDDER $	4TH HIGH BIDDER $	5TH HIGH BIDDER $	6TH HIGH BIDDER $	7TH HIGH BIDDER $	8TH HIGH BIDDER $	9TH HIGH BIDDER $	10TH HIGH BIDDER $	11TH HIGH BIDDER $	12TH HIGH BIDDER $
D	205	1-1	4,900	197.05	197.64	200.00	290.00	250.00	197.05	197.05	197.05	197.05	197.05	197.05	197.05	197.05	197.0
HGO	263	1-1	1,900	19.67	344.64	347.00	114.00	206.00	19.67	19.67	19.67	19.67	19.67	19.67	19.67	19.67	19.67
*PAM	002	4-1	1,700	10.86	10.86	10.86	10.86	10.86	10.86	10.86	10.86	10.86	10.86	10.86	10.86	10.86	10.86
TOTAL/AVER.		1	8,500	120.16	193.14	195.03											

13 *Pacific Lumber Sales Co.
14 Stevenson Co-Ply
15 Brazier Forest Prod.

SUMMARY OF BIDDERS

RANK	NAME	SBA CLASS	IDENTIFICATION NUMBER	TOTAL VALUE OF BID
HIGH 1	Bald Knob Land & Tbr.	N		$1,657,762.00
2	Mt. Adams Veneer Co.	L		1,656,062.00
3	Multnomah Plywood Co.	S		1,634,862.00
4	Caffall Bros. Tbr. Co.	N		1,021,380.00
5	Cuddeback Lbr. Sales	S		1,021,380.00
6	S.D.S. Lumber Co.	S		1,021,380.00
7	Fort Vancouver	S		1,021,380.00
8	Ober Logging	N		1,021,380.00
9	Columbia Vista	S		1,021,380.00
10	Linnton Plywood	S		1,021,380.00
11	Vanport Mfg.	S		1,021,380.00
12	Publishers Forest Prod.	L		1,021,380.00

DISTRIBUTION: Orig. and 1cc to RO (orig. to WO), 1cc to RO of SBA

I certify that I have personally examined the Bids submitted for this sale and that this is an accurate record thereof.

Signature Loretta Lowe

TITLE Supervisory Accounting Technician DATE 7/1/81

REMARKS

SPECIES	2P	3P	2S	3S
D	15	24	34	27
HGO			73	27

EEO Clearance per Sharon Fondue - 7/1/81
*PAM sold at the rate of 130.0 for 142 acres; per M figures for statistical purposes only.

2400-17 (5/73)

794

794

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L.I 115)                                  A P P R A I S A L   S U M M A R Y

SALE NAME: VTJ PARADISE II                                        SUMMARY CHECKED BY: V. BOYER              DATE: 04/30/81
  - - - - - - - - - - - - - - - - - - - - - - CARD TYPE 5 - - - - - - - - - - - - - - - - - - - - - - - - - - -
SPECIFIED RD CONST (MILES)   .0           RECONSTRUCTION (MILES)  3.6   PUNCH CR LIN $  16818  (INC. 0 . 2327 P&R **)
                          14-16                                   17-19                 20-26
PRODUCT: APPRAISED TO:   HAUL MILES:  39  TEMP RD CONSTR (MILES)    .9   TEMP RD COST $  1968?
   1     RANDLE WA                 30-32                          27-29  ADJ TO   (APPRAISAL BASE PERIOD):
   4     CAMAS WA                                 BASIC DATA PERIOD:C.Y.1979B   LOG: 1ST QTR 81 ALL
   0                                                                            PLY: 1ST QTR 81 ALL

 1 PRODUCT/UNIT                          ======================== CARD TYPE 6 ========================  UNIT OF MEASURE
 2 SPECIES                          14-15   1-1     1-1                                 4-1                 1    33
 3 SPECIES CODE                              D      WH                                  PAM                TOTAL OR AVERAGE
 4 % OF SPECIES                     16-18   305     263                                 002
 5 VOLUME                                 57,653  22,352                              20,005   T          100.0 %
 6 SELLING VALUE                    19-25   4930    1900                                1700   T          8500 34-40
 7 ADJ FACTOR SCHED  0581                 406.54  305.14                              263.24   A          470.51
 8 ADJ SELLING VALUE                       0.991   1.005
 9 CHIP & BYPRODUCTS                      402.90  306.67                              263.24
10 SELLING VALUE L.S.                      36.66   41.66                                0.00
11 FALLING & BUCKING                26-30 439.56  348.33                              263.24   A          499.20
12 SKIDDING & LOADING                      10.04   10.04                                4.12   A           15.90 41-44
13                                         20.60   20.60                               15.93   A           19.67 45-48
14 SUBTOTAL, STUMP-TO-TRUCK
15 HAUL                                    30.64   30.64                               20.05
16 ROAD MAINTENANCE CR CO-OP INP 21.22     28.23   28.23                               35.07   A           29.60 49-52
17 SUBTOTAL, TRANSPORTATION                23.54   23.54                                0.00   A           18.83 53-56
18 GENERAL LOGGING OVERHEAD & DEPREC       51.77   51.77                               35.07
19 (DEPRECIATION INCLUDED IN LINE 18)      12.12   12.12                               13.13   A           16.32 57-60
20 SUBTOTAL, ADMINISTRATIVE              ( 3.70)( 3.70)                              ( 3.30)
21 SLASH DISPOSAL (INC.   5.75 CO-OP)      12.12   12.12                               13.13
22 EROSION CONTROL                         16.69   16.69                                0.00   A           13.35 61-64
23 SNAG DISPOSAL                            1.71    1.71                                0.00   A            1.37 65-68
24 MISC INCL FIRE PROT                      0.00    0.00                                0.00   A             .00 69-72
25 SUBTOTAL, ENVIRONMENTAL PROTECTION       0.66    0.66                                0.46   A             .62 73-76
26 TEMPORARY ROADS & OTHER TEMP DEVPMTS    19.06   19.06                                0.46
27 (OTHER TEMPORARY DEVELOPMENTS)           3.39    3.39                                0.00   A            2.71 77-80
28 SUBTOTAL, TEMPORARY DEVELOPMENT        ( 0.49)( 0.49)                              ( 0.00)  A          (  .39)
29 SUBTOTAL, LOGGING COSTS                  3.39    3.39                                0.46
30 SPECIFIED ROAD COST (A18)        31-35 130.70  130.70                               60.71   A          116.37
31 TOTAL LOGGING COST L.S.                   2.36    2.36                                0.00   A            1.89
32 MFG. COST L.S.                         133.14  133.14                               60.71   A          120.26
33 PRODUCT HAUL                           212.56  141.24                              145.50   A          103.26
34 MFG. COST L.S.                           6.60    6.47                                0.00   A            5.30
35 TOTAL PRODUCTION COST L.S.       36-40 318.34  147.71                              145.50   A          108.56
36 CONVERSION (10)-(35)                   352.40  200.05                              214.21   A          300.02
37 P&R RATIO % NORMAL/ADVERTISED          207.00   67.40                               49.03   A          192.20
38 P&R MARGIN NORMAL/ADVERTISED            17.00   17.00                               17.00 NORM  17.0   ADV  17.0 **
39 INDICATED NET STUMPAGE (36)-(38)        72.39   30.17                               30.17 NORM 72.39  ADV  72.39 **
40 INDICATED ADVERTISED RATES (39)+(30)   194.69   17.31                               10.06   A          116.27
                                          197.05   19.67                               10.06   T       1021372.97
41 BASE RATES                                                                                  A          120.16
42 ADJUSTMENTS TO BASE RATES                2.00    2.00                                0.30   A            2.20
43 ADVERTISED RATES (40)+(42)               0.05    3.00                                0.00   A             .00
                                    41-45 197.05   19.67                               19.86   T       1021372.98
44 INDICATED STAT NET RATES(43)-(38)                                                           A          120.16
45 APPRAISED NET RATES                    124.62   17.31                               10.06   A          116.27
46 BASE INDICES                     46-50 194.69   17.31                               10.06   A          116.27
 * PLY* ACTUALLY APPRAISED AT $ 130.01/ACRE FOR     0.00    0.00   142 ACRES.           0.00
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Page 10

USD.)REST 'RVIC'

REI T O MBI AL
CONVERTIBLE AND NONCONVERTIBLE PRODUCTS
(REF. FSM 2490)

REGION 0 6	FOREST GIFFORD PINCHOT 0 3	DISTRICT (OR AREA) ST. HELENS 0 1	SALE NUMBER 0 7 9
STATE 5 3	COUNTY 0 5 9	SALE NAME VTS-CLEARWATER IV	QTR.-FY 4 - 8 1
ACRES IN SALE 349		LEGAL DISCRIPTION T9N.R6E.S13.14.23.24.WMS	COMPARTMENT 1 3 0 4
BID DATE 09/ 16/ 81/	STATUS 1	SBA SET-ASIDE N	APP. BASE PERIOD 2 - 8 1
SALVAGE Y	PRICING METHOD 1	PLAN'D SAB COL $ 38,550	TERM. DATE 03/ 31/ 84/
CONT. NO. 06095-5	CONTRACT FORM 2400 6	CONTRACTING OFFICER S	METHOD OF SALE A
		ZONE 2	CONTRACT DATE 09/ 16/ 8
			REG. 36CFR221 6

SPECIES	SPEC. CODE	PROD. UNIT	VOLUME	ADVERTISED RATES $	STAT. HIGH BID $	HIGH BIDDER $	2ND HIGH BIDDER $	3RD HIGH BIDDER $	4TH HIGH BIDDER $	5TH HIGH BIDDER $	6TH HIGH BIDDER $	7TH HIGH BIDDER $	8TH HIGH BIDDER $	9TH HIGH BIDDER $	10TH HIGH BIDDER $	11TH HIGH BIDDER $	12TH HIG BIDDER $
D	205	1-1	9,000	106.43	106.43	106.43	106.43	159.50	106.43	151.00	145.00	106.43	106.43	106.43	106.43	106.43	106.
C	242	1-1	400	49.80	49.80	49.80	49.80	49.80	49.80	49.80	49.80	49.80	49.80	49.80	49.80	49.80	49.8
HGO	263	1-1	10,300	2.00	272.50	272.50	272.00	219.00	254.00	207.00	100.00	2.00	2.00	2.00	2.00	2.00	2.00
*PAM	002	4-1	4,400	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.5
TOTAL/AVER.		1	24,100	41.52	157.13	157.13											

F.S. R-6
RECEIVED
SEP 2 1 1981
TIMBER
MANAGEMENT

SUMMARY OF BIDDERS

RANK	NAME	SBA CLASS	IDENTIFICATION NUMBER	TOTAL VALUE OF BID
HIGH 1	Puget Sound Plywood	S		$3,786,740.00
2	Brazier Forest Prod.	S		3,781,590.00
3	Linnton Plywood	S		3,713,320.00
4	Pacific Lumber Sales	S		3,596,190.00
5	Fort Vancouver	S		3,513,220.00
6	Wilkins, Kaiser & Olson	S		2,357,120.00
7	H.S.C. Logging	N		1,000,590.00
8	Latimer & Sons	N		1,000,590.00
9	Multnomah Plywood	S		1,000,590.00
10	S.D.S. Lumber	S		1,000,590.00
11	Vanport Mfg.	S		1,000,590.00
12	Bald Knob	N		1,000,590.00

I certify that I have personally examined the Bids submitted for this sale and that this is an accurate record thereof.

Signature Loretta Lowe

TITLE Supervisory Accounting Technician

DATE 9/16/81

REMARKS Verbal EEO Clearance given.

SPECIES	2S	3S	1P	2P	3P
D	47	23	1	8	21
C	2	98	--	--	--
H	65	35	--	--	--
A	67	33	--	--	
NF	81	19	--	--	

*PAM sold at the rate of $6.30 for 349 acres; Per

```
                                   A P P R A I S A L   S U M M A R Y
L.(  99)                                                                                         DATE: 08/10/81
                                                            SUMMARY CHECKED BY: V. Boyer
 SALE NAME: VTS-CLEARWATER SV  - - - - - - - - - - - - CARD TYPE 5 - - - - - - - - - - - - - - - - - - - - -
   - - - - - - - - - - - - - - -         RECONSTRUCTION (MILES)    .0   PURCH CR LIM $     0  (INC. $      0 PLR **)
 SPECIFIED RD CONST (MILES)    .0                                17-19                 20-26
                          14-16                                          TEMP RD COST $  23451
                        HAUL MILES:  38  TEMP RD CONSTR (MILES)   1.6   ADJ TO    (APPRAISAL BASE PERIOD):
 PRODUCT:  APPRAISED TO:                                         27-29   LUR: 2ND QTR 81 ALL
   1       KAMOLE WA                30-32    BASIC DATA PERIOD:C.Y.1979R  PLT: 2ND QTR 81 ALL
   4       CAMAS WA                                                                       UNIT OF MEASURE
   8                       ------------------------- CARD TYPE 6 -----------------------          1    33
                                                                               4-1
                          14-15   1-1     1-1     1-1                          PAH*       TOTAL OR AVERAGE
 1 PRODUCT/UNIT                    D       C      H&O                          802
 2 SPECIES                16-18   205     242     263                        10.26%   T       100.0 %
 3 SPECIES CODE                 37.34%   1.66%  42.74%                         4400   T        24100 34-40
 4 % BY SPECIES           19-25   9000     480   10300                       265.54   A       396.91
 5 VOLUME                       566.79  462.00  302.02
 6 SELLING VALUE                 0.999   1.000   1.009                       265.54
 7 ADJ FACTOR SCHED  0001       566.22  462.00  304.74                         0.00
 8 ADJ SELLING VALUE             36.66    0.00   43.23                       265.54   A       430.02
 9 CHIP & BYPRODUCTS      26-30 602.88  462.00  347.97                         1.53   A         5.74 41-44
10 SELLING VALUE L.S.             6.60    6.60    6.60                        33.32   A        42.43 45-48
11 FALLING & BUCKING             44.47   44.47   44.47
12 SKIDDING & LOADING                                                         34.85
13                               51.15   51.15   51.15                        46.85   A        47.96 49-52
14 SUBTOTAL, STUMP-TO-TRUCK      40.21   40.21   40.21                         0.00   A        19.62 53-56
15 HAUL                          24.00   24.00   24.00                        46.85
16 ROAD MAINTENANCE FS CO-OP DEP 20.33 72.21 72.21 72.21                      26.93   A        30.79 57-60
17 SUBTOTAL, TRANSPORTATION      31.65   31.65   31.65                       (11.53)
18 GENERAL LOGGING OVERHEAD & DEPREC (13.39)(13.39)(13.39)                    26.93
19 (DEPRECIATION INCLUDED IN LINE 18) 31.65  31.65   31.65                     0.00   A         4.50 61-64
20 SUBTOTAL, ADMINISTRATIVE       5.51    5.51    5.51                         0.00   A         2.29 65-68
21 SLASH DISPOSAL (INC.    2.25 CO-OP) 2.00  2.00    2.00                      0.00   A          .00 69-72
22 EROSION CONTROL                0.00    0.00    0.00                         0.50   A          .71 73-76
23 SNAG DISPOSAL                  0.74    0.74    0.74                         0.50
24 MISC INCL FIRE PROT            9.05    9.05    9.05                         0.00   A          .97 77-80
25 SUBTOTAL, ENVIRONMENTAL PROTECTION 1.19 1.19   1.19                       ( 0.00)  A       (  .00)
26 TEMPORARY ROADS & OTHER TEMP DEVPMTS ( 0.00)( 0.00)( 0.00)                 0.00
27 (OTHER TEMPORARY DEVELOPMENTS) 1.19    1.19    1.19                       109.21   A       155.01
28 SUBTOTAL,TEMPORARY DEVELOPMENT 31-35 165.25 165.25 165.25                   0.00   A          .00
29 SUBTOTAL, LOGGING COSTS        0.00    0.00    0.00                       109.21   A       155.0?
30 SPECIFIED ROAD COST (A10)    165.25  165.25  165.25                       140.95   A       179.55
31 TOTAL LOGGING COST L.S.      222.17  155.78  156.30                         0.00   A         5.75
32 MFG. COST L.S.                 6.91    7.15    7.15                       140.95   A       185.30
33 PRODUCT HAUL           36-40 229.08  162.93  163.45                       250.16   A       340.31
34 MFG. COST L.S.               394.33  328.18  328.70                         7.30   A        89.70
35 TOTAL PRODUCTION COST L.S.   200.55  134.70   19.27                        14.00 NORM  14.0  ADV  12.6 %*
36 CONVERSION (10)-(35)          14.00   14.00   14.00                        32.66 NORM 52.09  ADV 40.10 **
37 P&R RATIO % NORMAL/ADVERTISED 74.15   56.93   42.00                       -25.24   A        36.01
38 P&R MARGIN NORMAL/ADVERTISED 134.40   77.77  -23.53                       -25.20   T    807116.90
39 INDICATED NET STUMPAGE (36)-(38) 134.40 77.77 -23.53                               A        36.01
40 INDICATED ADVERTISED RATES (39)+(38)                                        0.50   A         2.10
                                  3.00    2.00    2.00                        25.76   A         4.71
41 BASE RATES                   -27.97  -27.97   25.53                         0.50   T   1000589.90
42 ADJUSTMENTS TO BASE RATES                                                          A        41.52
43 ADVERTISED RATES (40)+(42) 41-45 106.43 49.00  2.00                         0.50   A        41.52
                                106.43   49.00    2.00                         0.50   A        41.52
44 INDICATED STAT NET RATES(43)-(38) 46-50 106.43 49.00 2.00
45 APPRA[illegible] NET RATES     ...0    ...0    ...0
46 [illegible] IND[illegible]
* PAH*  ACTUALLY APPRAISED AT $   6.30/ACRE FOR     349 ACRES.
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797

APPENDIX C
Page 12

797

USD XRES RVIC

:EP OF BE LE
CONVERTIBLE AND NONCONVERTIBLE PRODUCTS
(REF. FSM 2490)

REGION 0 6
STATE 5 3
ACRES IN SALE 341
BID DATE MO. 09/ DAY 16/ YR. 81/
SALVAGE Y
CONT. NO. 06094-8

FOREST Gifford Pinchot 0 3
COUNTY 0 5 9
STATUS 9
PRICING METHOD 1
CONTRACT FORM 2400 6 _

DISTRICT (OR AREA) St. Helens 0 1
SALE NUMBER 0 8 0
SALE NAME VTS-WAYSIDE
LEGAL DISCRIPTION T9NR6E,S11,14,15,WMS
SBA SET-ASIDE N
PLAN'D SAB COL $ 31,550
CONTRACTING OFFICER S
APP. BASE PERIOD 2 - 8 1
TERM. DATE 03/ 31 / 84/
METHOD OF SALE A

QTR.-FY 4 - 8 1 QTR. YEAR
COMPARTMENT 1 3 0 4
ZONE 2
CONTRACT DATE _/_/_/
REG. 36CFR221 6 _

SPECIES	SPEC. CODE	PROD. UNIT	VOLUME	ADVERTISED RATES $	STAT. HIGH BID $	HIGH BIDDER $	2ND HIGH BIDDER $	3RD HIGH BIDDER $	4TH HIGH BIDDER $	5TH HIGH BIDDER $	6TH HIGH BIDDER $	7TH HIGH BIDDER $	8TH HIGH BIDDER $	9TH HIGH BIDDER $	10TH HIGH BIDDER $	11TH HIGH BIDDER $	12TH HIGH BIDDER $
D	205	1-1	5,300	41.25	42.00	42.00	45.25	85.00	41.25	41.25	41.25	41.25	41.25	41.25	41.25		
C	242	1-1	1,200	9.17	9.17	9.17	9.17	9.17	9.17	9.17	9.17	9.17	9.17	9.17	9.17		
H&O	263	1-1	11,000	2.00	244.00	244.00	241.50	139.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00		
*PAM	002	4-1	2,900	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50		
TOTAL/AVER.		1	20,400	12.41	143.09	143.09											

F.S. R-6
RECEIVED
SEP 2 1 198
TIMBER MANAGEMENT

SUMMARY OF BIDDERS

RANK	NAME	SBA CLASS	IDENTIFICATION NUMBER	TOTAL VALUE OF BID
HIGH 1	H.S.C. Logging	N		$2,919,054.00
2	Fort Vancouver	S		2,908,779.00
3	Bald Knob	N		1,991,954.00
4	Brazier Forest Prod.	S		253,079.00
5	Latimer & Sons	N		253,079.00
6	Pacific Lumber	S		253,079.00
7	Puget Sound Ply.	S		253,079.00
8	S.D.S. Lumber	S		253,079.00
9	Vanport Mfg.	S		253,079.00
10	Wilkins,Kaiser & Olsen	S		253,079.00
11				
12				

DISTRIBUTION: Orig. and 1cc to RO (orig. to WO). 1cc to RO of SBA

I certify that I have personally examined the Bids submitted for this sale and that this is an accurate record thereof.

Signature Lorella Love
TITLE Supervisory Accounting Technician
DATE 9/16/81

REMARKS ** EEO Clearance Pending

SPECIES	1S	2S	3S	1P	2P	3P	SP
D	--	43	31	3	14	9	--
C	--	--	100	--	--	--	--
H	--	36	64	--	--	--	--
A	2	45	53	--	--	--	--

*PAM sold at the rate of $4.25 per acre for 341 acres; Per M figures for statistical purposes only.

```
                                                              A P P R A

   SALE NAME: VFS-WAYSIDE
            - - - - - - - - - - - - - - - - - - - - - - - - - - - - -
   SPECIFIED RD CONST (MILES)      .0               RECON
                                 14-16
   PRODUCT:  APPRAISED TO:   HAUL MILES:  40    TEMP
      1        RANDLE                     30-32
      4        CAMAS                                BASIC

                                                ------------
 1 PRODUCT/UNIT                              14-15   1-1
 2 SPECIES                                             D
 3 SPECIES CODE                              16-18   205
 4 % BY SPECIES                                     25.9
 5 VOLUME                                    19-25    53
 6 SELLING VALUE                                    527.2
 7 ADJ FACTOR SCHED 0001                              0.9
 8 ADJ SELLING VALUE                             .  526.6
 9 CHIP & BYPRODUCTS                                 36.6
10 SELLING VALUE L.S.                        26-30  563.1
11 FALLING & BUCKING                                 20.2
12 SKIDDING & LOADING                                44.5
13
14 SUBTOTAL, STUMP-TO-TRUCK                          64.7
15 HAUL                                              38.9
16 ROAD MAINTENANCE FS COOP DEP 24.72                25.1
17 SUBTOTAL, TRANSPORTATION                          64.0
18 GENERAL LOGGING OVERHEAD & DEPREC                 29.2
19 (DEPRECIATION INCLUDED IN LINE 18)               (10.9
20 SUBTOTAL, ADMINISTRATIVE                          29.2
21 SLASH DISPOSAL (INC.   2.09 CO-OP)                 7.6
22 EROSION CONTROL                                    1.3
23 SNAG DISPOSAL                                      0.0
24 MISC INC FIRE PROT                                 0.7
25 SUBTOTAL, ENVIRONMENTAL PROTECTION                 9.7
26 TEMPORARY ROADS & OTHER TEMP DEV/MTS               0.9
27 (OTHER TEMPORARY DEVELOPMENTS)                   ( 0.0
28 SUBTOTAL,TEMPORARY DEVELOPMENT                     0.9
29 SUBTOTAL, LOGGING COSTS                   31-35  160.7
30 SPECIFIED ROAD COST (A10)                          0.0
31 TOTAL LOGGING COST L.S.                          160.7
32 MFG. COST L.S.                                   213.1
33 PRODUCT HAUL                                       6.8
34 MFG. COST L.S.                            36-40  220.0
35 TOTAL PRODUCTION COST L.S.                       380.7
36 CONVERSION (10)-(35)                             174.5
37 P&R RATIO % NORMAL/ADVERTISED                     14.0
38 P&R MARGIN NORMAL/ADVERTISED                      69.2
39 INDICATED NET STUMPAGE (36)-(38)                 105.2
40 INDICATED ADVERTISED RATES (39)+(30)             105.2

41 BASE RATES                                         3.0
42 ADJUSTMENTS TO BASE RATES                        -64.0
43 ADVERTISED RATES (40)+(42)                41-45   41.2

44 INDICATED STAT NET RATES(43)-(30)                 41.2
45 APPRAISED NET RATES                       46-50   41.2
46 BASE INDICES          .                            0.0
 ,PAR  ACTU.... AP.....SED ... )     $/AC    OR
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79

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                A P P R A I S A L   S U M M A R Y
                                      SUMMARY CHECKED BY: V. Boyer            DATE: 08/07/81
E                                                                    - - - - - - - - - - - - - - -
- - - - - - - - - - - - - - CARD TYPE 5 - - - - - - - - - - - - - - - - - - - - - - - - - - -
                                                                   0  (INC. $        0 PoH **)
ILES)      .0         RECONSTRUCTION (MILES)    .0   PURCH CR LIM $
      14-16                                  17-19               20-26
D:   HAUL MILES:  40  TEMP RD CONSTR (MILES)   1.1   TEMP RD COST $  16879
                30-32                        27-29   ADJ TO   (APPRAISAL BASE PERIOD):
                      BASIC DATA VERSION:C.Y.1979R   LBR: 2ND QTR 81 ALL
                                                     PLY: 2ND QTR 81 ALL
                 ----------------------- CARD TYPE 6 -----------------------   UNIT OF MEASURE
                                                                   4-1     :            1    33
                 14-15   1-1     1-1     1-1                       PAM*      TOTAL OR AVERAGE
                          D       C      H&O                        081
                 16-18   205     242     263                     14.224   T        100.0 %
                       25.985   5.085  53.924                      2900   T          20400 34-40
                 19-25   5300    1200   11000                    263.47   A        360.43
                       527.21  461.11  294.65
                        0.999   1.000   1.009                    263.47
I                      526.60  461.11  297.30                      0.00
                        36.66    0.00   43.23                    263.47   A        394.86
                 26-30 563.34  461.11  340.53                      5.45   A          18.12 41-44
                        20.22   20.22   20.22                     31.32   A          42.68 45-48
                        44.56   44.56   44.56
                                                                  36.77
RUCK                    64.70   64.70   64.70                     42.64   A          39.47 49-52
                        30.94   30.94   30.94                      0.00   A          21.55 53-56
 COOP DEP 24.72         25.12   25.12   25.12                     42.64
ATION                   64.06   64.06   64.06                     23.71   A          20.42 57-60
M&SAD & DEPREC          29.20   29.20   29.20                    ( 9.16)
DED IN LINE 18)       (10.94)(10.94)(10.94)                      23.71
ATIVE                   29.20   29.20   29.20                      0.00   A           6.56 61-64
.   2.89 CO-OP)          7.65    7.65    7.65                      0.00   A           1.17 65-68
                         1.36    1.36    1.36                      0.00   A            .00 69-72
                         0.00    0.00    0.00                      0.56   A            .72 73-76
                         0.75    0.75    0.75                      0.56
NTAL PROTECTION          9.76    9.76    9.76                      0.00   A            .02 77-80
THER TEMP DEV/MTS        0.96    0.96    0.96                    ( 0.00)  A         (  .00)
VELOPMENTS)            ( 0.00)( 0.00)( 0.00)                       0.00
DEVELOPMENT              0.96    0.96    0.96                    103.68   A         159.51
OSTS             31-35 160.76  160.76  160.76                      0.00   A            .00
 (A10)                   0.00    0.00    0.00                    103.68   A         159.51
 L.S.                  160.76  160.76  160.76                    140.95   A         171.49
                       213.12  155.70  159.00                      0.00   A           5.76
                         6.00    6.64    6.64                    140.95   A         177.24
                 36-40 220.03  162.42  165.72                    252.63   A         336.75
OST L.S.               300.76  331.10  334.40                     10.84   A          57.00
)                      174.50  129.93    6.05                     14.00 NORM  14.0   ADV   13.0 **
/ADVERTISED             14.00   14.00   14.00                     32.41 NORM 40.53   ADV  45.40 **
ADVERTISED              69.29   56.72   41.89                    -21.57   A           9.27
PAGE (36)-(30)         105.29   73.21  -35.04                    -21.57   T      189096.00
ED RATES (39)+(30)     105.29   73.21  -35.04                             A           9.27
                                                                   0.50   A           2.05
                         3.00    2.00    2.00                     22.07   A           3.14
E RATES                -64.04  -64.04   37.04                      0.50   T      253079.00
40)+(42)         41-45  41.25    9.17    2.00                             A          12.41
                                                                   0.50   A          12.41
 RATES(43)-(30)         41.25    9.17    2.00                      0.50   A          12.41
S                46-50  41.25    9.17    2.00                      0.00
                         0.00    0.00    0.00
...SED ... $      $/AC    OR     381     ES.
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799

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Comments on "A Report to the Committee on Appropriations, U.S. House of Representatives on the Timber Sales Process of the U.S. Forest Service"

We are pleased to respond to this report. The Surveys and Investigations Staff provided an interesting perspective to the complexities of the Forest Service timber sale process.

Response will be made in the order presented in the summary of the report. In addition, there are comments relating to other items in the body of the report.

ANALYSIS OF FORTY FIVE RANDOMLY SELECTED COMPLETED CONTRACTS

Item:

The report states that there is a 15.8 percent overcruise of the total volume of the 45 contracts, and it concludes that this is an expression of the total sold-cut relationship in the Pacific Northwest Region.

Forest Service Comment:

While this may be true for the 45 sales, we submit that the 45-sale sample is not statistically sound and, therefore, no reliable conclusions can be reached relative to a comparison of the total Forest Service sold and cut volumes. As the report points out, the Mead Study, completed in September 1981, reports a very close correlation between sold and cut volumes. An analysis of 842 sales closed between October 1, 1977, and September 30, 1979, in the Pacific Northwest Region shows that the total cruise volumes were 0.05 percent lower than cut volumes. The cruised volume was 2,945,448 Mbf and the cut volume was 2,946,962 Mbf.

A study done by the Northwest Timber Association in 1975 reveals the same close volume relationship between sold and cut. A study done by the Willamette National Forest at about the same time also shows that the sold and cut volumes even out over time.

However, the report correctly points out that there were wide differences between sold and cut volumes on individual sales. The other studies cited above corroborate this observation.

Item:

The report states "the 15.8 percent net difference between the cruise estimate, and the amount actually paid for, is well above the acceptable ±5 percent range set by the FS."

Forest Service Comment:

Actually, the ±5 percent alluded to is not a standard by which the sold and cut volume is judged. Rather, it is a statistical sampling standard which pertains to sampling error.

Sampling error pertains only to the structure of the sample to be cruised in arriving at a total estimate. The estimation of defect and breakage also has an important effect on the accuracy of the cruise. The cruising standard in Region 6 for this combined effort is plus or minus 15 percent of the scaled (cut) volume.

Item:

The report states that one official offered that some of the difference in sold and cut volume could be attributed to slash or waste. The implication was that the purchaser may be removing only the higher quality wood and leaving the lesser quality logs in the slash pile.

Forest Service Comment:

We do not believe this explains the significant volume variation. Some breakage does normally occur and there is normally an amount of cull and waste, but we submit that reasonably diligent contract administration can prevent an abnormal amount of breakage and waste.

Item:

The report states a Forest Service check scaler postulates that third party scalers seldom vary in their scale in favor of the Government, and that this may contribute to a difference between sold and cut volume.

Forest Service Comment:

This is highly conjectural, with no sound basis for judgment. Forest Service checkscalers regularly check scale the third party scaling organizations to determine that they are within accepted tolerances.

OVERSTATED SOLD BUT UNCUT INVENTORY

Item:

The report states that the Forest Service is carrying a phantom inventory of 2,574 MMbf sold but uncut timber in Region 6, valued at $650 million. To compute these figures, the investigators apply the 15.8 percent cruising error, which they computed from the 45-sale analysis, to the 16,295 MMbf volume under contract in Region 6.

Forest Service Comment:

Again, we submit that the 45-sale analysis is not statistically sound and therefore, cannot properly represent volume under contract figures for Region 6. Using the 0.05 percent figure from the Mead Study would indicate that the inventory is 8,148 Mbf and $2,000,000 short.

FS APPRAISALS DO NOT REFLECT FAIR MARKET VALUE

Forest Service Comment:

The Forest Service appraisal system is designed to determine stumpage values for an operator of average efficiency at the time that the tract of timber is advertised. The determination is based on costs and prices recently experienced by a cross section of timber purchasers. The resulting advertised rates are analagous to a "spot" price. Timber purchasers decide at the time of bidding how much the timber is worth to them at the time that they are going to cut it. Purchasers are under a compulsion to buy Forest

Service timber for a number of reasons, but mainly their own conditions of supply, manufacturing efficiency, marketing abilities, and demand dictate whether or not to buy and how much to pay. Many purchasers, especially in the Pacific Northwest, are almost totally dependent on Government timber to supply their manufacturing facilities. Their perception of a diminishing supply of Government timber has caused some unusually high (speculative) bidding. This has occurred over the last several years because purchasers have been unsure of where the Forest Service planning process would leave them vis a vis the timber supply. Of course, the anticipation that the inflationary trend would continue has been an important factor influencing bidding. If all conditions remained constant, i.e., costs, prices, supply, demand, etc., then the advertised rate would remain valid for a period downstream.

SHELTON SUSTAINED YIELD UNIT

Item:

The report states that if the Forest Service had used transaction evidence in appraising sales in the sustained yield unit the Government would have received additional revenue.

Forest Service Comment:

The Shelton Cooperative Sustained Yield Unit is a one-of-a-kind unit created by a special act of Congress. It was created to establish long-term timber supplies for the Shelton-McClary, Washington area in an effort to stabilize the economy of those communities. One of the provisions of the agreement was that the timber would be sold noncompetitively. Though the timber sales are appraised using the same procedures and data as other sales in Region 6, there is no overbidding. It is true that if the Forest Service sold sales in the Unit competitively, there would be additional revenue to the Government.

As of Friday, April 23, Simpson Timber Company, the cooperator in the Sustained Yield Unit, has been operating its Shelton Manufacturing facilities on a two-shifts-a-day basis, while most others in this area are running at 40-60 percent of capacity.

MOUNT ST. HELENS SALVAGE

Item:

The report states that the value of white fir and hemlock is declining and will have been reduced by 33 and 65 percent, respectively by the end of the third and fourth year.

Forest Service Comment:

Though we do not know the basis for the figures, we have no reason to dispute them. Of the approximately 940 MMbf of Mount St. Helens salvage timber scheduled for sale, over 400 MMbf has been sold as of March 31, 1982. Our current plans are to sell the remainder this Fiscal Year. However, members of the House and Senate have requested that we defer selling 14 sales until action is completed on the legislation for the Natural Volcanic area.

SKEWED BIDDING

Item:

The report states that the Forest Service should have advertised the white fir and hemlock in Mount St. Helens salvage sales at a fixed rate rather than allow them to be bid on. The investigators contend that the volume of these whitewood species will be substantially less than the advertised volume because of deterioration, and thus the total value will be less. They further contend that the high bidder at the auction may in fact not have tendered the highest bid after all.

Forest Service Comment:

We agree with the investigators that under these circumstances the white fir and hemlock should have been fixed rated. Forest Service policy as stated in the Manual provides that if a species comprises less than 25 percent of the sale volume it should be fixed rated. The final tract value will not be known until the sales have cut out and all the volume has been computed. However, deteriorating species in sales of this nature will hereafter be sold at a fixed rate.

NEGATIVE VALUE INCLUDED IN SALES

Item:

The report states that there is a problem with the practice of reducing positive valued species rates to compensate for negative values encountered with some species.

Forest Service Comment:

The report indicates that this is Forest Service policy and practice. This is correct. During the environmental assessment process a determination is made whether or not it is essential that the negative value species need to be removed for silvicultural and/or environmental reasons. If it is determined that it is essential, the sale is appraised as a "package deal," whereby the positive valued species carry the negative species. If the determination is made that there is no silvicultural and/or environmental need to remove the species it can be advertised for optional removal, and no charge is made against the positive species. We believe that it is sound conservation ethics to promote the removal of as much wood as possible, as well as to provide timber stand conditions which prevent insect and disease epidemics.

COLLUSIVE BIDDING

Item:

The report states that USDA General Counsel considers collusive bidding to be a problem and that sealed bidding would preclude most of the problem.

Forest Service Comment:

While we have no reason to say that collusive bidding is a significant problem at the present time, we recognize that the Forest Service must be ever diligent in monitoring the bidding process on a continuing basis. There is a formal process whereby this is done and a Bid Monitoring Report is prepared periodically. It is possible to have collusion in either sealed or oral bidding. Congress debated this in 1976. The NFMA of 1976 prescribed sealed bidding. There was substantial objection to sealed bidding. Companies in small communities could not bid successfully on sales which were essential to their survival. This was especially so in areas of limited supply of Government timber. These problems caused Congress to repeal that portion of NFMA in 1978. We now offer a mix of sealed and oral bids.

SPECULATIVE BIDDING

Item:

The report describes the circumstances of speculative bidding and examines some of the causes and effects. It further describes Forest Service proposals to alleviate the problem.

Forest Service Comment:

The investigators have accurately portrayed the situation which has developed in the last few years in the Pacific Northwest. Since the publication of their report, the Forest Service has published final timber sale procedures in the Federal Register which became effective on April 15, 1982. They are designed to reduce speculative bidding. A copy of the publication is appended to this paper.

FOREST SERVICE PLANS FOR IMPROVING THE TIMBER SALES PROCESS

Forest Service Comment:

As described above, the final policy for new timber sale procedures was published and became effective on April 15, 1982.

SIGNIFICANT DIFFERENCES IN REGION 6 AND 8 TIMBER SALE PROCEDURES

Item:

Comparison of analytical and transaction evidence appraisals (TEA).

The report states that the analytical appraisal system is used in all Regions but 8 and 9, where the transaction evidence system is used. It further states that the Forest Service has encouraged those Regions using the analytical system to begin studies regarding the adaptation of the transaction evidence system for their own use. It points out that Region 6, when appraising timber for land exchanges, condemnations, and trespasses, uses a form of transaction evidence, but there is opposition from the timber industry to the general adoption of transaction evidence.

Forest Service Comment:

The report generally describes the situation accurately.

Overbidding in the Pacific Northwest Region has diminished considerably. Westside Region 6 bid rates for the period January 1 - March 31, 1982, average about $110 per Mbf, compared to $360 per Mbf for 1980. The primary reason for this is because the Pacific Northwest Region has been selling only short term (less than 3 years) sales since about January 1, 1982.

THIRD PARTY SCALING

Item:

The report states that there are serious weaknesses in Forest Service policies and controls which provide considerable opportunity for fraud to occur although specific cases of fraud had not been uncovered to date.

Forest Service Comment:

The Forest Service has developed an action plan to implement the recommendations of the Office of Inspector General report. The Forest Service recommended, and the Secretary of Agriculture has tentatively approved a legislative proposal to provide a special fund, to be financed from sale receipts, from which the third party scaling organization would be paid by the Government. This would further preclude the possibility that there may be timber purchaser influence because he is paying the third party scaling organization for the scaling job. The drafting of the legislative proposal has not been completed.

RELATED PROGRAMS IN SUPPORT OF TIMBER SALES

Item:

Roads

Forest Service Comment:

The report describes the situation well. We are continuing our emphasis on cost reduction.

Item:

Reforestation

Forest Service Comment:

No further comment necessary.

Item:

Land Lines

Forest Service Comment:

No comment is necessary.

THE BUDGET PROCESS AS IT RELATES TO THE TIMBER SALE PROGRAM

We believe that the report has stated the budget process quite well. We have no further comment.

Transaction evidence has been used in Regions 8 and 9 because there is a large private land based market for comparability. The situation in the Pacific Northwest is quite different.

The Forest Service believes that the transaction evidence system is workable in the western Regions. However, there needs to be a much more responsive system developed in the West (especially the California Region and the Pacific Northwest) to account for some rather extreme variation in timber quality and costs of production that occur between timber sales there. We have been working with the Bureau of Land Management on a transaction evidence system that might be used in the West.

Item:

Scaling vs. tree measurement.

Forest Service Comment:

The reporting by the investigators covers the subject quite well. We have no further comment.

Item:

Oral vs. Sealed Bidding.

Forest Service Comment:

The report states the current situation well. As stated in our earlier response there are certain apparent advantages to oral bidding as they relate to community stability.

At page ii the report states that the Forest Service lacks a management system that permitted the investigative staff to pull contracts at random and examine the volume and value of timber sold under a contract, the volume and value actually cut and the differences. No such records are regularly assembled and analyzed. Thus the staff had to pull the contracts manually, examine each one and put the information together on a sample basis on the test Forests.

While there might be a reason for not having such detailed information in 1940 when the agency sales/cut level was 2.0 billion b.f. annually with income at $5,000,000 and stumpage value at $3.00/M, it should not be the situation in 1980 when 11.4 billion b.f. was sold at a bid price of almost $2 billion dollars and an average stumpage rate of almost $175.00/M b.f. Compared with 1940 current sales volume is 6 times greater but average value is 400 times greater in total dollars and 70 times greater in value per thousand board feet.

The report shows that there are serious variations in volume sold and volume cut, a problem exacerbated by the absence of any apparent analytical controls. In the Willamette NF 24 Study contracts, for example, Douglas fir, the favored species which is bid in at the highest prices and is 61% of the volume sold undercut on contract after contract, overall it undercut -19%. Hemlock etc., 21% of the volume sold, undercut 16%. Cedar etc., was only 1.4% of the volume and it overcut +9%, the only species group to show a consistent overcut. The "Per Acre Material", (PAM as it is called), was the lowest value material and constitute 18% of the timber sold. Remarkably PAM cut out exactly almost to the estimate, time after time.

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[illegible]

April 23, 1982

DISTRIBUTION LIMITED

TO : Honorable Sidney R. Yates
Chairman, Subcommittee on Interior
Committee on Appropriations

FROM : Robert E. Wolf
Assistant Chief
Environment and Natural Resources Policy Division

Robert E Wolf

SUBJECT : Report, Timber Sales Process of U.S. Forest Service, Surveys and Investigations Staff, April 1982.

Since 1940 the Forest Service has sold over 358 billion b.f. of timber with a bid value total of over $15 billion. On the other hand the actual cut has been 321 billion b.f. which brought in income of $9.7 billion. The value of uncut timber under contract uncut, in theory would be $5.3 billion based on an estimated 37 billion b.f.

The Survey and Investigation report, April 1982, "Timber Sales Process of the Forest Service", raises some very fundamental questions in a comprehensive and well documented analysis.

The report shows that the financial management of the business aspect of selling timber has been neglected in several serious ways.

In examining the report it would appear that, over time, based on the timber sales procedures now in use as much as $5 billion in potential revenues may be lost and as much as 26 billion b.f. of timber wasted just in Western Oregon. The most basic finding is that 120 units of Douglas fir timber put under contract yield only 100 scaled and paid for. This in turn causes an even larger revenue expectation loss because Douglas fir value is at least double the other species.

The consistency of this cutting performances suggests that the laws of chance are not at work. Henry Ford said that the wood you cut warms you twice, once when you cut it and once when you burn it. Timber bidders apparently are also warmed twice on the contracts they buy. They bid high on the favored species and low or not at all on the low valued species. But they do not pay what is anticipated, but manage to shave the cost.

Using the first sale on page 25 as an example the revenue derived was - 30% below that bid and the volume removed was - 16% below that estimated to have been sold. In the process the sale had been changed from on that was 64% Douglas fir, 17% Hemlock and 18% PAM to one that was 50% Douglas fir, 28% Hemlock and 22% PAM.

Looked at in a way analogous to the timber sale procedure, no mill would take an order for 11.5 million b.f. at $1.9 million and let the wholesaler come in and pick over the lumber stacks, taking out 9.6 million b.f. and pay 30% less. This is what is occurring. It certainly does not conform to prudent business practices.

If this were to occur on an ocassional sale it might be viewed as an aberration. However, on contract after contract this is the situation.

The effects are (1) Financial and (2) Silvicultural.

1. Financial

In the Pacific Northwest, which is the major timber selling area, Douglas fir sells for a price about twice that of the other species and as much as 10 to 20 times that of the "Per acre material" which is called PAM. The fall down in Douglas fir--or other highest value species--actually cut disproportionately reduces actual income.

There is no "averaging out" in this situation. The Staff Report observes that some of the Douglas fir loss may be material taken out as the cheaper PAM. When one can get $250/M logs for $20/M it sure helps shave real stumpage costs.

These are real revenue losses that cannot be recouped as long as timber is sold under a system that lets the purchaser determine the sale outcome.

On just 37 contracts on the Willamette and Mt. Hood National Forest in one year the Douglas fir revenue losses totalled $12.8 million, a sum $400,000 greater than the proposed cut in the 1983 Forest Research budget. Since the budget equation must take into account the total cost of government and revenues, losses of this magnitude have substantial budgetary implications. If the critical need to seek a budget balance has a meaning, then the realization of revenue expected based on bids offered for a valuable governmental asset can be a significant factor in setting budget levels.

The situation defined by the report are not new or unusual. The only difference with the past is that timber values are higher and the magnitude of the loss is thus greater.

Looked at over the long haul, based on a rough estimate of the Douglas fir inventory in the Western Oregon National Forest alone, the potential revenue loss may equal $5 billion dollars if not corrected.

The present situation, in effect, allows the buyer to determine in large measure what he will actually pay for timber, no matter what he bids. A tighter sale system would result in bids that are more realistic, minimizing the buyers ability to manipulate the sale revenue.

The high bid prices, which average over $250/M and with one up at $816/M suggest stumpage bid values that equal or exceed the average wholesale value of the manufactured lumber. It is illogical to expect that timber buyers will pay finished lumber prices for stumpage--and they don't. The real cost is leveraged down by the cutting systems.

A further adverse impact is that the present system permits each buyer to seek to create his own "deal". Those who are most successful are thus improving their position versus their competitors. The competition is not to improve utilization in the woods but to remove the material at the least real cost. This encourages waste--not conservation--and the competition is the antithesis of healthy.

2. Silvicultural

A sustained yield program harvesting the full amount of timber that ought to be cut based on inventory and growth requires that sales by species be related to anticipated growth by species as well as existing inventory by species. Using the Willamette sales as examples the Douglas fir undercut -19%, the Hemlock etc., -16% and the PAM came out even. To sell 1 billion b.f. of Douglas fir the agency must prepare and offer 1.19 billion b.f., for Hemlock it must sell 1.16 billion b.f. Thus to sell 2 billion b.f. of timber 2.35 billion b.f. must be taken from the inventory. The Forest Service inventory of softwood timber in Western Oregon is shown in its "Timber Situation" book, Table 11, at 174 billion board feet. This suggests that in fact the yield from this inventory will be only 148 billion b.f. due to the fall down in cut versus estimate. This the effect is that -26 billion b.f. will be lost, a volume just in the Western part of Oregon equal to 10 years "allowable cut". Even more significant is that 10 billion b.f., or 70%, of the fall down would be in valuable Douglas fir.

The adverse impact of taking out 120 units from inventory to get 100 are easy to appreciate. No business could operate "in the black" if this were the condition that prevailed.

Corrective Action

1. The agency could be directed to allocate funds on a first priority basis which puts in place by January 1, 1983 a system of volume and financial control over timber contracts of over $10,000 in value which places before the Chief of the Forest Service at least a monthly report by species on volume sold, volume sold, volume cut and uncut volume, with the values for each. For each contract with "cutting units" the data should be displayed as each unit cuts out, along with an explanation of deviations from the estimate. Data by sale size and value groupings should be displayed so that to the extent that this reveals weaknesses in the selling system corrective action can begin to be quickly targeted to the problem areas. The detailed responsibility should be place on the Regional Forester, with sufficient information furnished to the Chief so that he is alerted to both problems and proposed corrective actions simultaneously. Particular action should be targeted as soon as a sale is made to those where bid prices well above the norm have been offered, including direction to withhold award of a sale when an aberrant bid appears that may predict problems.

2. Timber sale volume estimating procedures should be improved but in the interim other approaches should be applied on a test basis.

a. Lump sum fixed total bid price sales should be tried. Under this arrangement, while a cruise would be made and available to bidders to examine, the timber would be sold as, for example 3 cutting units, one 25 acres, $100,000, one 20 acres, $90,000 and on 18 acres $110,000, total minimum bid $300,000. There are some details that need to be considered, such as the price to be paid for any timber cut in trespass, blow down, etc. Provision could be made that the price that would be charged would be subsequently determined and not less than an appraised price held in confidence additional timber would be priced by multipyling this any bid premium.

b. The agency has authority to sell logs. It could be directed to enter cutting contracts with loggers who would harvest the timber under the supervision of the agency, to cover at least 5% of the volume to be sold in the fiscal year, with special funds appropriated to cover the cost of entering cutting contracts? On these sales the agency would make volume estimates, including using the sale as a training facility for cruisers, and closely supervise the falling in order to minimize damage and maximize volume removed. The agency could also build the needed road as a separate road building contract. The logs would be assembled by grade and auctioned off at bid. Some auctions could be by sealed bid and others by oral bid. Alternatively, in some sales the cutting contracts could be on the basis of logs by grade and species with the contract logger paid at a rate covering cost to deliver the logs to a mill. The logs would be sold to a successful bidder to be delivered by specified dates based on Forest Service grading of the logs and their volume.

The sale of 5% of timber in logs would give the agency a sound expertise in the problems of logging, log sales and marketing, affording it an effective basis for judging whether the 95% of the volume being sold in the way now used is being effectively marketed. The "value" of the timber so sold, for purposes of computing payments to counties, would be the net income after all costs. Funding could be handled by the same device as the "salvage timber sales", setting up a permanent appropriation under a working fund. After two years the system could be evaluated as to whether to continue or close the process out.

3. The agency also could be directed to develop and apply an inventory management system that relates "allowable cut" to actual utilization. The development of stand per acre by species information for inventory would then be closely matched with removal experience using as benchmarks specific estimates of areas scheduled for sale and actual results.

Summary

A proposal to adopt these procedures would be strongly resisted by many in industry. However the $12.8 million in lost revenue on these two National Forests alone on contracts terminated in just 1980-81 suggests that real savings, increased income and improved efficiency would result. Cost to have contractors build roads and logs timber would be no greater than those typically experienced by the industry in doing the work. Since many firms already use contract loggers, there would be no displacement in employment opportunities. The main new cost which would recouped, would be those required to develop sales management expertise and technicians. To the extent adopted, the committee could also require that actions be reported to it or taken.

Timber Appraisals

For the Willamette N.F. the Staff Report shows the agency appraised 274 million b.f. at $108/M b.f. and the bids offered averaged for all species $192/M b.f. or over 75% above the appraisal. However, the actual volume cut and paid for was only 244 million b.f. The real price paid dropped to about $184/M b.f., which is still 70% above the appraisal. On the Mt. Hood the over bid, based on offered volume, as 140%. This is double the over bid on the Willamette. However, on the Mt. Hood, when the actual income is prorated against the actual volume, while the $4.3 million loss is a 11% drop in income, on a per M basis the money paid was only a little below the bid rate. The all species bid rate is $202.40/M for 205 million b.f. and the amount paid per M for the 186 million b.f. removed averages at $200.16/M or -1%. The Williamette is thus experiencing a volume loss, a dollar and a per M loss. The Mt. Hood is experiencing a volume loss and a dollar loss but very little per M shrinkage. This suggests different purchaser behavior or perhaps a different supervisory pattern on sales.

As to the timber appraisal, some of the difference between the two Forests may be the nature of the timber itself. The Mt. Hood appraisers placed a value on its sales at $84/M while the Williamette appraisers were valuing theirs at $108/M or +$24/M which is 28% higher. The bidders were reacting differently. The Williamette bidder offered a premium over average apparised price of +$84 or an average price of $192/M. On the other hand the Mt. Hood bidders offered a premium of +$118 and an average bid price of $202/M, thus judging the value of the Mt. Hood stumpage to be 6% higher than that on the Willamette. In the real world, the average price paid for timber actually cut, the Willamette buyers dropped their real average cost to $184/M or a bid premium of +$76/M while the Mt. Hood buyers paid $200/M, a bid premium of +$116 over the appraisal.

On both Forests the appraisers widely missed the mark in estimation of bidder judgement of fair market value. Those on the Willamette considered their timber more valuable and the bidders paid, in reality, 70% more. On the Mt. Hood, the bidders believed the appraisals more widely understated the value, paying 137% over the asking price in the real world.

There is no logical reason for the appraised prices to so consistently and so markedly be below what the purchasers are willing to bid.

The timber appraisal system consistently understate timber values. Also because it is based on past costs and selling prices and the theoretical operator of average efficiency, the appraisal fails to measure the market. While a case can be made for not selling timber in a way that seeks to drive up costs for stumpage, it makes no sense to perpetually apply "loss leader" pricing for stumpage. This present system tends to belatedly follow the market but alway be far below it, then when the market falls, as is often the case in this cyclical industry, the appraisals fall. But since appraisals are so low to begin with the only effect is a "statistical" one. Their bid price as a percentage of appraised price and the bid premiums simply narrow while still remaining far above what ought to be expected when one is selling a valuable commodity.

Since the forest products industry operates in the real world of markets for its products, and some substantial elements sell large volumes of private stumpage and buy private timber, it ought to be possible to apply an appraisal system for public timber that comes closer to meeting market conditions as they are agreed on by bidders when the sale occurs.

The 11 point revision in timber contracting procedures adopted April 15, 1982 are based in part on tempering the bidding, which is judged to have been extremely high. These will add to the cost to firms to hold timber and not to operate it. The provisions are not likely to have a large impact because they do not add significant costs to hold timber. In fact point (8) discounting and (9) indexing, when fully implemented will probably give back more than the small added costs to enter a bid and secure a contract seem to add. For example indexing guarantees a buyer that if the market drops $10.00 after he enters a bid his stumpage cost will drop $10.00. If it rises $10.00, his stumpage cost will rise only $5.00. All of the added entry costs and contract holding costs combined in the other 9 points only will add a few cents per M to holding a timber sale. A market value appraisal systme would in and of itself induce a lot more caution in bidding.

Logic suggests forcefully that when one continuously places a basic commodity at auction at a price that is overbid on the average by 140% that more bidders are going to be attracted, with many throwing caution to the winds, as they are caught up in the bidding action. First they will have hopes they can get the timber at a reasonable price. Then as the bidding proceeds they will conclude that a competitor, who has just denied them this hope, will pay for frustrating this hope.

The combination of the open oral auction and the low appraised prices exacerbate the problems.

The reasons the agency has failed to devise and apply a real market value system are complex. What it comes down to is a reluctance to be charged with alleged "monopolistic behavior", with forcing industry wood costs up, and with guessing what the product price, demand and market will be when the timber is cut. A small individual timber holder, or even a corporation selling timber, is immune from public censure about it stumpage pricing practices. Buyers can refuse to buy, seeking alternative supplies and as sellers these owners are at liberty to hold their stumpage. A public agency is denied, in many respects, from acting as a private party would. Their situation increases the dilemma when an agency, by all counts, is the major timber holder in an area. The pressures against acting from the benefitting users are not only substantial but continuing. The anamoly is that agency people will spend endless hours in meetings with an Industry "timber purchasers" committee listening to complaints appraised prices are too high, while at that very moment a sale is being conducted on a nearby Forest where a species may bid up to $816.00 per M.b.f. Even now, with the forest products industry depressed, the agency is lowering appraised prices while in highly competitive areas bid rates still are running as much as 100% above these lowered appraisals.

The pricing of timber is not a unique function fraught with the difficulties of appraising a one of a kind masters' painting. Timber is a basic commodity. Private consulting foresters appraise timber for private owners. It is appraised for tax purposes, it is appraised by buyers of private and public timber. Nevertheless, there are distinct problems. Despite the similarity of stands, on say the Mt. Hood National Forest, each one presents its unique differences which are significant in setting a precise value. Also each user has different options that he influences by the way he cuts the trees and by which material he allocates to lumber, plywood or chips... Finally, timber is bought for the near future. It will be 1 to 3 years until it is cut. Buyers must make judgements about the future market and gauge their guess against supplies in hand and supplies that may be secured.

However, despite the complexities, it is possible to appraise public timber nearer to what the bidders will offer than has long been the practice. The Staff report at pages 39-41 and 45-48 makes some excellent, cogent observations on the cause and effect of the situation.

--when there is adequate competition the appraisal is merely the starting point for bidding.

--Forest Service appraisals are on a cash basis. Sales are on a terms basis and these are lenient.

--The appraisal is the determinant of price bid in low or no competition areas, such as the Shelton Sustained Yield Unit on the Olympic National Forest, Washington. Here the sale price is estimated to have been $38,000,000 less than would have been paid the Forest Service if the timber were of market value.

--Transation Evidence Appraisals are used by the Forest Service in limited situations but not for most of the timber sold.

--The heavy reliance on oral bidding enhances the chance for their to be collusion, skewing timber values and awards.

In this connection it is noted that the report does not point up that in some cases oral bids may be "preemptive". Here very high price offered may be to freeze out bidders, the opposite of colluding. This inclusion of such bids as transaction evidence would skew values upward.

Suggested Actions

1. Assistant Secretary Crowell testifing on the FY 1983 budget set forth "Administration priorities which have shaped this budget" ...these are to "generate receipts to the Federal Government... increasing user fees for activities that are being provided free or below cost", and "increased efficiency".

To help the Administration meet this goal the Forest Service could be directed to institute timber valuation and sale procedures that assure that when timber is sold not only is the cost to make the sale recovered but also that the appraised price reasonably approximate bid price experience and expectations. In every National Forest the appraised price shall be adjusted, where recent bids have exceeded appraisals by an average of 25%, so that is gap is closed. In situations where there is low competition the appraised price shall be adjusted by transaction evidence data. Where competition appears to be imperfect, as evidenced by either a low level or a very high level and oral bids have been used, greater use be made of sealed bids.

2. In the Shelton Sustained Yield Unit and in other specific non-competitive areas each sale shall be made only after a determination that the appraised or contract price is approximately the fair market value as determined by the most recent sales under open competition in the same timber types.

The 11 points adopted April 15, 1982 for timber sales

These are cited in the Staff Report and I analyzed them for you Feb. 20 as published in the Jan. 20 Federal Register. Points (8), discounting price to be paid for cutting a contract early and (9), applying the stumpage rate adjustment Index to sales in Western Oregon and Washington, were cited by me as likely to be the least viable and most troublesome of the proposed changes. The others, by and large would tighten up the timber sales process. On (8), discounting, the Forest Service plans to try it on some test Forests, and on (9) Indexing, it plans to develop the plan of application and schedule it in 1983. In my view both ideas are still fraught with potential problems of a large magnitude. A far more straightforward approach than the "discounting" would be to include in each contract for over one year and in excess of $50,000 an anticipated cutting rate. A purchaser who cut more rapidly, and thus paid earlier would get a discount, while one who delayed would pay additional interest. This would help overcome the valuation problems cited by Justice and others in the Staff report. All bidders would start from the same set of performance expectations which would be taken into account by all potential bidders. The purchase could still cut when he wished. In addition the discounts should be better related to money costs in the real world rather than such peculiar arrangements as 150% of the Treasury borrowing rate.

The Index system suffers from the flaw that when it rises the stumpage rate goes up by only 50% of the Index change but when the Index falls the stumpage rate drops by 100% of the market fall. If an Index is used the upward and downward effects should be the same. An Index, if desirable, to be more truly representative, should also include in its calculus major cost changes as well as price changes.

There are, however, some fundamental problems that both concepts present. An Index and a discount system combined make actual price paid subject to two new variables which no one knows how they will change when the timber is cut.

The discount rate will be determined by the Treasury borrowing rate which fluctuates in a manner unrelated to timber business. Also the 50-250% variable depends on the length of the contract and the buyers alternatives. The Index fluctuates with the price of lumber. In one peiod stumpage indices can be falling while interest rates are rising, in another indicies may rise and interest rates drop, while in another both may be moving in the same direction. The net effect is a floating real price unattached to the real value of the timber. Meanwhile buyers of short term contracts, which are now to be stressed may, at best, get only a small index value--or none. Thus relations between buyers of sales heavily dependent on National Forest timber may be changed as compared to competitors who have private supplies that they can use to guide their bidding and removal actions.

A free market proponent would point out that the government should not sell its timber in a manner that differs from the way that the several million owners of 280 million private acres would proceed. The private seller normally requires that the buyer pay for the timber and finance its purchase, leaving it to the buyer to decide whether he will use his own working capital or resort to open market borrowing.

These will complicate rather than simplify and clarify the pubic timber pricing procedure. In comparison a system that set an anticipated rate of cutting with a business like discount or penalty depending on whether the bidder cut faster or slower would permit bidders to exercise flexibility with the full understanding at the outset of the effects and with the contract price fixed as a base.

Suggested action

1. Before test implementing these procedures, the Forest Service could be asked to make analyses of past existing sales in a period of rising markets and falling markets to determine the likely effect of their proposed policy and any alternatives. They could be directed to provide, not only

the Forest Products Industry but also others, a full chance to review this analysis before adopting any modifications or testing any proposed system.

Summary

I have reviewed the other parts of the Staff Report but am deferring comments on it. From both an analytical and a operational standpoint, however, all of the report appear to be well constructed and contain useful insights into the timber sale process. The issues the Investigation Staff examined are complex and not easy to unravel and neatly lay out. They have done a first rate job in all respects. This report simply reinforces the conclusion that if the Investigative Staff can describe and define the programs so effectively, those operating them should be able, from their position of greater technical expertise, to devise effective corrective actions.

Mr. YATES. Let's talk about the cutting practices for a while which our committee went into to some degree. I notice here a report by the General Accounting Office on January 24, 1978. You weren't Chief in 1978 were you?

Mr. PETERSON. No, sir.

Mr. YATES. What position did you hold then?

Mr. PETERSON. Deputy Chief.

TIMBER HARVEST LEVELS FOR NATIONAL FORESTS

Mr. YATES. Well, then, you are probably familiar with this report entitled "Timber Harvest Levels for National Forests" and the summary which appears on the cover says, "Timber harvest levels developed by the Department of Agriculture's Forest Service for National Forests are of concern to timber-dependent communities, environmentalists, the timber industry and the Congress. Some want timber harvests increased; some want them reduced."

You were caught in a storm then, and I assume you are now.

"Forest Service timber management plans GAO reviewed had not been developed with enough uniformity and precision to assure that harvest levels set forth in the plans are reliable goals and constraints to sustain timber cutting in coordination with other forest resource uses. Basing timber sales and management decisions on harvest levels that are too uncertain could lead to overcutting or undercutting. The Forest Service needs congressional guidance and direction on these issues."

Well, the Congress gave the direction in some measure by the passage of the legislation, didn't it?

Mr. PETERSON. Yes, sir.

FOREST SERVICE TIMBER CONTRACTING

Mr. YATES. "In implementing timber management plans there is also a need to reduce conflicts between timber and other resources such as wildlife and scenic beauty."

I had the impression from reading our investigative staff's report and other memoranda made available to us that the Forest Service contracting system and review of the contract or operations does not provide the Government with the maximum amount of money that it should receive.

The Government leases land to the oil companies, and has meters on the pipelines that presumably can tell how much oil is taken out of the ground and, therefore, how much its royalties should be.

According to our report, the practices of the Forest Service, especially in Region 6, are such that you are not getting all the money that you should be getting in connection with the contracts.

For example, why should you, in Region 6, permit the contractors to determine the size of the logs when you don't do that in other regions of the country?

Mr. PETERSON. No, we do not let the contractor in Region 6 determine the size of the logs. We have utilization standards in that region that we enforce and we do not let contractors determine the size of the logs.

Mr. **Crowell**. I was saying that each timber sale contract has a minimum specification for both the tree size and character and the log size which will be treated as a merchantable log and which would have to be paid for by the purchaser, whether or not he removes it from the ground.

So there is, of course, an incentive to remove a merchantable log because he has to pay for it. And those requirements are strictly enforced by the timber sale officers.

TIMBER SCALING

Mr. **Yates**. All right. Let's read from the report of the Appropriations Committee's investigators, "Scaling versus Tree Measurement, scaling is the method used to measure the actual volume of timber the contractor has taken from the National Forest. It is this volume that the contractor actually pays for. This method is used in all regions with the exception of Regions 8 and 9. The scaling was historically done exclusively by FS personnel, until the 1950's when because of the budget cuts a third-party scaling program was implemented by the FS."

And you still have that third party scaling program, don't you?

Mr. **Peterson**. Yes.

Mr. **Yates**. "Third party scaling companies because of their disproportionate salaries drew many Government scalers away from the FS. Therefore, third party scaling became not just the least expensive way to go, but the only way to go, since the Forest Service did not have the scalers do the work."

So far we are in agreement, aren't we?

Mr. **Peterson**. Well, I think we need to add a little bit to that.

Mr. **Yates**. Well, let's hear your addition.

Mr. **Peterson**. In some places, Mr. Chairman, we were in a situation where we had our scaler at one point. BLM had a scaler at another point on the same road. The private owners had another scaler on the same road.

Mr. **Yates**. The only one left now is the private scaler.

Mr. **Peterson**. And so we went to the third-party scaling as a more efficient way to do the total job of scaling.

Mr. **Yates**. Why is that more efficient?

Mr. **Peterson**. Because he is scaling all kinds of timbers. Some days our scaler might be there all day and there might not be a single load come off of National Forest lands. There might be two loads which would keep him busy 25 percent of the time. So this was an attempt to have a more efficient system that would have independent scalers doing the scaling for all owners. That was the basic idea in third-party scaling.

I should point out that we are still doing a lot of our own scaling in places where there isn't all this mixed ownership. Where it is more efficient to do so, we are still scaling in the Forest Service. More than half of our own timber is scaled using our own scalers.

USE OF SCALING BUREAUS

Mr. **Crowell**. It should also be pointed out, Mr. Chairman, that these third-party scalers are employees of scaling bureaus. The scaling bureaus have boards of directors which are made up of timber owners including representatives for the Forest Service, the BLM, and the States as well as private owners so that we have close review over the scaling rules and, of course, any time a scaling rule became unfair to the Government it would become unfair to other landowners as well.

So, we feel there is an adequate check on the fairness of the scaling rule which would be applied. As a matter of fact, most of the scaling bureaus have scaling rules which really are patterned after scaling rules developed by the Forest Service.

Mr. Yates. Let's continue with the report. "The practice of scaling is largely done for two reasons: Custom among the timber industry, and in old-growth timber it is very difficult to accurately measure the waste or defect in timber until it has been cut. The third party scalers are contracted for and paid for by the timber purchaser."

Is that not true?

Mr. Crowell. That is not accurate. I am not sure what the Forest Service arrangement is today, but usually the buyers and sellers both pay half the cost of the fee to the scaling bureau in order to get the services of the scaling bureau.

The scaling bureau is going to be utilized and is serviceable only if it is a fair arbiter of the determination of volume between buyer and seller.

Mr. Yates. Well, the impression I had as I read this report was that it is comparable to the roadbuilding which the contractor put in and then set up their expense as part of the total expense.

"The third party scalers are contracted for and paid for by the timber purchaser. The scaling cost is included in the operator's cost in the appraisal."

Chief, what is your impression of that?

Mr. Peterson. Let me first say that there are two other controls that we have on this whole thing.

Mr. Yates. Well, first let me ask the question, how true is the statement by our investigators that the third party is contracted and paid for by the timber purchaser who later on put the cost of this into their appraisal?

Mr. Peterson. That pays for part of the scaling from the timber purchaser of National Forest lands. Purchasers of private timber also pay, so it is a combination of the two.

Mr. Yates. Who hires the scalers?

Mr. Peterson. The scaling bureau. That is an independent organization.

Mr. Yates. Who hires the scaling bureau? Who asks them to scale?

Mr. Peterson. The scaling bureau is an independent organization that does the scaling.

Mr. Yates. When are they activated? How are they activated?

Mr. Peterson. We have an agreement with the scaling bureau to scale National Forest timber in certain specific locations.

Mr. Yates. Well, then, they are not paid for by the contractor, are they?

Mr. Peterson. No. The actual paying of the scaling bureau is done by timber purchasers in general, but part of them are National Forest purchases, part of them are private land and part of them are BLM purchases.

Mr. YATES. Then, as I understand what you are saying, you have an agreement with the scaling bureau to do scaling of the National Forests but that their work is paid for by the contractor.

Is that the way it works?

Mr. PETERSON. Not directly.

Mr. YATES. Well, wait a minute. The contractors pay for it and the Government reimburses the contractors as a part of the overall appraisal?

Mr. PETERSON. Let me see if I can break this out.

Mr. YATES. Okay.

Mr. PETERSON. The scaling bureau is an independent organization.

Mr. YATES. With whom FS has a contract?

Mr. PETERSON. Yes.

Now, it costs them X amount per thousand to do scaling. Then we allow the purchaser in our appraisal, costs that he incurs in his whole operation. Scaling is one of the costs that is reflected in our appraisal.

We don't pay him any money. This is just one of the costs reflected in the appraisal.

Mr. YATES. Does the scaler look to the purchaser for his payment?

Mr. PETERSON. He looks to the scaling bureau.

Mr. YATES. Does the scaling bureau look to the purchaser for its payment?

Mr. PETERSON. It looks to a lot of sources for its payment including the timber purchaser.

Mr. YATES. Who pays the scaling bill? Do you pay it?

Mr. PETERSON. No, the timber purchasers normally pay the scaling bureau.

Mr. YATES. The Forest Service does not pay the scaling bureau?

Mr. PETERSON. That is correct.

Let me point out there are a couple of controls on this whole thing that are important. We have a check scaler. A check scaler is a person who, on an unannounced basis, nobody knows he is going to do it, goes in and scales a load of logs that the scaling bureau has already scaled, or right before the scaling bureau scales it, to check to be sure that the scaling bureau is doing its job and is not either overstating or understating the volume.

THE SCALING OF LOGS

Mr. YATES. Why do you have the scaling bureau scale logs instead of the trees?

Mr. PETERSON. In the West, as your investigators state, there is a large amount of defect in old trees that cannot be seen from the ground. You can't see for sure whether the tree is hollow. You can't be sure that the upper two logs are sound. A tree that looks pretty good when it is standing, may in fact break all to pieces when felled because it is full of rot.

In the West, It is very difficult to accurately measure a tree in the old growth before it is felled.

Now, in the East, where we are dealing with second growth, young trees have very little defect, we generally use tree measurements.

Mr. **Yates**. Well, now, that is the industry position, isn't it? According to the GAO report dated July 16, 1975, on page 3 it says,

> The tree measurement method has been used for many years in the Forest Service's eastern and southern regions on some thinning and young growth sales in the western region and by the Bureau of Land Management.
>
> At issue, however, is the extension of tree measurement to sales of defective old growth trees which make up a large part of the Forest Service's timber holdings in the western regions.
>
> The timber industry has maintained that a change in the measurement method will bring about many uncertainties, additional costs, and large financial risks in the defective stands of high value western timber, and that there is no conclusive evidence that tree measurement, even if done well, would actually cost less than log measurement.

Mr. **Peterson**. We agree with that. That is true.

Mr. **Yates**. That is what the timber industry maintains.

Mr. **Crowell**. We agree that it is accurate.

Mr. **Yates**. Why don't you have defective trees in the other regions?

Mr. **Crowell**. There are some, but because the other regions are primarily working on second growth or even third growth, the trees are a lot younger and do not have the same defects. Consequently, tree measurement can be much more accurate because you don't have the problem of dealing with potentially hidden defects.

Mr. **Peterson**. Mr. Chairman, I went from the West where scaling is in vogue, to the south, where we use entire tree measurement. There is quite a difference in conditions between the two regions.

I will point out a couple of other things. If you are dealing with very high value materials, and in the Pacific Northwest it is very high value, then any error due to a large defect becomes a very large dollar amount.

If you miss in the South, and you are not likely to miss by very much because the defect isn't very great, the value is lower on the second growth, and the dollar amount isn't near as much.

Mr. **Yates**. Okay.

USE OF TREE MEASUREMENT IN THE WEST

Let's go back to check scaling. Did you ever use tree scaling rather than log scaling in the West?

Mr. **Peterson**. Oh, yes. We use it some places in the West right now for second growth, if the trees are generally about the same size.

Mr. **Yates**. Well, are you saying, then, that the only contracts which are not tree-scaled are the Douglas Fir?

Mr. **Peterson**. Oh, no. It is generally old growth timber, which may be Douglas Fir, Ponderosa pine, or hemlock.

It is quite possible that over time we will increase the amount of tree measurement because we will be cutting more second growth. I should point out that from an efficiency standpoint, and we are concerned about efficiency, you have to measure the trees when they are standing. You need to measure a high proportion of the trees to get the accuracy right if the actual payment is going to be based upon the estimate in the field.

Then you have to estimate a higher percentage of the trees. So you increase the amount of field work that you do and reduce the amount of scaling. We want to be sure that that is not overestimated.

There are some theoretical pre-measurements, the fact that when the guy buys it, he buys the whole thing and if he breaks them, they are his.

Mr. YATES. That is what I was going to ask you about the top logs. You don't get paid for the top logs, do you, when you use the log method instead of the tree scale method?

Mr. PETERSON. Oh, sure, we get paid for it, if it has a certain percentage of sound material in it as stated in each contract.

Mr. YATES. I thought you lost the top log?

Mr. PETERSON. Oh, no, not unless it is so defective that it has no value.

Let me add that the Office of the Inspector General, at our request, has recently looked at third-party scaling and has made certain recommendations including a legislative proposal to establish a special fund from receipts which would provide for the Government, not the purchasers, to pay for scalers.

Mr. YATES. Why isn't that desirable?

Mr. PETERSON. Well, we think that this has some merit and it is now being considered as a legislative proposal which is very likely to come up later this year.

Mr. YATES. How much of a fund do you need for that?

Mr. PETERSON. I don't know the amount of that but it wouldn't change the cost to the Government.

Mr. YATES. Well, does it make sense for the Appropriations Committee to recommend an appropriation for that purchase?

Mr. CROWELL. Not at this point.

Mr. PETERSON. Because we don't know the amount.

Mr. YATES. Why not at this time?

Mr. CROWELL. Because we don't have the authorizing legislation in place.

Mr. YATES. The committee has sometimes acted without the authorizing legislation in place. The Forest Service has been delighted with some of the things that the Appropriations Committee has done. As a matter of fact, we have asked the Forest Service which legislative language would be better for the Government and the Forest Service has made recommendations.

As I understand the Chief's testimony, he wants legislation proposed which will set up a fund to permit the Government to pay for its own scalers.

Now, I take that to mean that the Chief is inclined toward the belief that it would be better if the Government had its own scalers.

If I read him correctly, then, why shouldn't we put in an appropriation for that?

Mr. PETERSON. No. We would not be employing our own scalers. We would be paying the scaling bureau directly.

Mr. YATES. I will accept your amendment.

Suppose there was a payment directly by the Government rather than out of the contractor's overall expense? I take it that you favor that, otherwise, you wouldn't be recommending the fund.

Why do you recommend that?

Mr. **Peterson**. Well, I think it wouldn't change the cost to the Government, it changes the appearance that somebody might think they got their paycheck from the purchaser.

Mr. **Yates**. That is what the Inspector General was talking about when he wrote in the report on September 23, 1980, "Third-party scalers are generally honest, skilled professionals who take pride in the quality of their work. This survey disclosed no evidence of any third-party scaling organization's employees who were attempting to defraud the Government. Nevertheless, the survey disclosed serious weaknesses in Forest Service controls which provided considerable opportunity for fraud to occur."

There is the opportunity for fraud to occur in the event that a scaler did not make an appropriate report to the Forest Service on the size of the log, isn't there?

Mr. **Peterson**. Well, he might do that once or twice and get by with it. But with the check scaling system being what it is, a surprise check scale, and we found that type of thing happening, he would lose his job immediately.

Mr. **Yates**. Even with your check scaling system, I read further from our investigative committee's report, "FS field personnel advised they would consider 25 percent of the third party scalers to be incompetent, biased in favor of industry and that the scaling always seems to favor the timber purchaser by as much as 1.5 percent of the volume of the sale. Applying this 1.5 percent to the Region 6 annual volume sold of 5.4 billion board feet at a rate of $215 per thousand board feet results in a potential loss of revenue of about $17 million per year in Region 6 alone."

Do you want to comment on that?

Mr. **Crowell**. A couple of things on that I think, Mr. Chairman. First of all, I think that kind of allegation is clearly hearsay which is inadmissible evidence and I think there has to be more than that kind of a charge to support any kind of serious allegation that the Government is losing revenue.

The second comment would be that that revenue loss calculation, I think, is grossly inflated.

Mr. **Yates**. Well, you are suggesting the Government isn't losing any money?

Mr. **Crowell**. I am suggesting the Government isn't losing anything because of the scaling situation.

The third-party scaling situation is not perfect because scaling logs is an art, not a science.

Mr. **Yates**. And, therefore, not accurate?

Mr. **Crowell**. It is not totally accurate and there will be errors in it, not so much errors, but there will be differences in opinion between two competent scalers as to what a particular log would scale out at.

TREE MEASURING SYSTEM IN REGIONS 8 AND 9

Mr. YATES. Well, let's talk about measurements in Regions 8 and 9 for a second. The investigative study says: "Tree measurement on the other hand, is a presale measurement system used in Regions 8 and 9 and is exclusively conducted by FS personnel. The measurement is done during the time the sale area is marked, and each tree to be sold is counted and marked with FS tracer paint. Each tree is measured as to its diameter and height—if the sale was under 100,000 board feet—or a sampling—i.e., 1 in 10 or 1 in 20—of the trees according to diameter are measured. These volumes computed under the tree measurements are a part of the FS contract in Regions 8 and 9, and those volumes along with the bid prices are what the purchaser pays for.

"The FS advises they intend to move to a total tree measurement system in those areas not presently using it, as soon as the old growth timber is significantly diminished."

Is that true?

Mr. CROWELL. That could be or would be decades from now.

Mr. YATES. Is this your intention?

Mr. CROWELL. Well, it is a present intention but it is something that wouldn't be carried out for many decades and, of course, the situation could change between now and then.

Mr. YATES. Yes, but wait a minute.

The implication from this is that a tree measuring system is better than a log measuring system.

Mr. CROWELL. That is the implication, but we would dispute that. It is not an accurate statement when you are applying it to old growth.

Mr. YATES. The Chief agreed with the statement a moment ago and you, in effect, agreed with it, too, when you said that it wouldn't be happening for decades if, indeed, it does happen.

Mr. PETERSON. Remember I told you, Mr. Chairman, that, we have to look at the relative cost of the different methods.

DIFFERENCES IN COSTS OF SCALING METHODS

Mr. YATES. All right, what is the cost?

Mr. PETERSON. Well, taking the South that I know quite well, we are generally talking about relatively flat land that is readily accessible all year. In the West and many other places, we are talking about quite inaccessible country where it may take a long time to get into and has a short season, so additional field work can be quite expensive.

And so we can't ignore the relative cost because either one gives adequate results.

Mr. YATES. What is the difference in cost?

Mr. PETERSON. Between tree measurement and log scaling?

Mr. YATES. Yes.

Mr. PETERSON. I asked some of our technical people earlier this week and they said in some places tree measurement would be considerably more expensive than scaling and in some places the reverse would be true. You can't make a general statement.

Mr. YATES. Well, I thought you said just a few seconds ago that you have got to take into consideration the difference in cost. I asked you what the difference in cost is and you said you can't give me an answer because it is too general.

Mr. **Peterson**. It varies.

Mr. **Yates**. It varies, all right. Then, what conclusion shall I draw from the fact that there is a difference in cost but we don't know what the difference in cost is?

Mr. **Peterson**. The conclusion you should draw is that this decision needs to be made in the field by technical people who look at both methods. Both methods will yield sound results.

Mr. **Yates**. What conclusion is the committee to draw if, as you say, you have to take into consideration the difference in cost as a factor in determining whether tree scaling or log measuring should be used?

Give us some facts on what the costs are. I asked you what the difference is and you say you have got to take the area into consideration. Maybe you ought to supply that for the record.

Mr. **Crowell**. It would depend on what particular area you are looking at, and what particular stand of timber you may be having under examination as to whether tree measurement or log scaling would be the better, less costly and more accurate method of carrying out the measurement of the volumes that would be generated from that stand.

You can't make generalizations about it and I think the conclusion to be drawn is that both systems are workable. Both systems have their place. One can be superior to the other depending on the circumstances.

Mr. **Yates**. I would agree with that except that you don't speak to the cost. The Chief said you have got to take into consideration what the cost is. Well, I am willing to take that into consideration but you are not telling me what the difference in cost is.

Are you saying that the tree scaling measuring system costs more than the log measuring system?

Mr. **Crowell**. It can, particularly in old growth timber where you would have to spend an inordinate amount of time actually trying to estimate the volume in each tree to be harvested.

Mr. **Yates**. Is it an inordinate amount of time considering what the benefit to the Government might be in terms of price?

Mr. **Crowell**. Yes, it would be because you can determine the volume that would be taken from that tree in an alternative way, namely, by log scaling when the log is either on the truck or in the mill yard.

That could turn out to be much cheaper than it would be to attempt to ascertain the volume while the tree is still standing in the forest.

Mr. **Yates**. But isn't this also a factor? If you measure the tree and include it in the contract, that tree is going to be purchased by a contractor, is it not? In that case, the Government receives the money, rather than taking the chance that the contractor won't cut that tree and will pay only for the good logs that he cuts?

TREES DESIGNATED FOR CUTTING

Mr. **Peterson**. No. He pays for a tree. If we mark a tree designated for cutting and he doesn't cut it, he still pays for it. He doesn't get to select the trees to cut or not cut.

Mr. **Yates**. Yes, but that is not the system you are using here.

Mr. **Peterson**. Oh, yes.

Mr. **Yates**. But he is paying only for the logs. Suppose you designate a tree and he doesn't cut it.

Mr. **Peterson**. He still pays for it.

Mr. **Yates**. I thought he paid only on the basis of the logs that are cut.

Mr. **Peterson**. Anything he leaves in the sale area that is supposed to be taken, we scale and charge him for it.

Mr. **Yates**. You mark a tree and the contractor then comes up to you and says, "I won't take that tree because I think it is infested or it is hollow."

Mr. **Peterson**. He is required to pay for it and also to fell it if it is included in the sale.

ADVANTAGES OF DIFFERENT SCALING METHODS

Mr. **Yates**. Then I don't see the advantage, what is the advantage to log measuring over tree scaling?

Mr. **Crowell**. He is required to fell that tree and then if it has logs which meet the merchantable specifications stated in the contract, he is required to take and pay for those logs, or that log that comes from that tree under the log scaling system.

If you were selling the tree on a tree measurement basis, he would be buying the tree regardless of whether it had any merchantable logs in it or not. But, of course, he would be going out and appraising the sale himself and would come up with his own independent estimate of what the value might be. He would possibly be paying less than he might get otherwise, if he were more certain that he was going to be paying only on merchantable volume that the timber would generate from the sale.

Mr. **Peterson**. Not to make this more complicated for you, Mr. Chairman, but if you are going to use tree measurement on highly defective old growth, the procedure that is now in use is that you actually fall some of the trees ahead of making the sale and cut them into logs to try to get an evaluation of the defects before you make the sale.

So, in addition to trying to measure the tree you also fall a sample of the trees and determine what the defect is.

So, what we are trying to say is that we think either method would yield satisfactory results to the Government and neither one is superior.

An analysis of 842 sales in Region 6 made by an independent consultant, Walter Mead, showed that the total cruise volume of sales that were made were within one-twentieth of 1 percent of the actual cut volume.

That is fantastic accuracy between estimates and actual cut volumes.

ADDITIONAL GAO REPORT MATERIAL

Mr. YATES. All right. Let me continue to read from page 48 of the report.

> FS advises they intend to move to a total tree measurement system in those areas not presently using it, as soon as the old growth timber is significantly diminished. The FS has had a long term study in process to move to the tree measurement system, as it considers tree measurement volume tables to be much more accurate and estimates it will be approximately 15 to 20 years before FS can move anything close to 100 percent tree measurement system.

Is that correct?

Mr. PETERSON. I think that is even an optimstic estimate of when we might move to that.

Mr. YATES. Where did our investigators get that estimate? Is it from your office?

Mr. PETERSON. They got it from somebody in the field, I guess.

Mr. YATES. Really? As to when you were going to be able to move to the tree measurement system? I would have thought it would come out of your office.

Mr. PETERSON. I don't think that came from the central office. I think that came from someone in the field.

As we pointed out earlier, the more that you are cutting second growth timber, which is more uniform in size and has less defect, then it makes more sense to use tree measurement.

So this decision will be made over time as each situation indicates that that is a good way to go.

TIMBER INDUSTRY REACTION TO TREE MEASUREMENT

Mr. YATES. Well, in view of the next sentence perhaps it will never come into existence, "Largely this movement depends on the rate of removal of old growth timber in the Northwest and will need a gradual phasing in to obtain the forest industry's sanction."

They are not going to sanction it, are they, the forest industry?

Mr. PETERSON. Well, interestingly enough, the timber industry is not uniformly opposed to this idea. In fact, in some places we are using it with good support.

Mr. YATES. I am talking about Region 6.

Mr. PETERSON. In Region 6.

Mr. YATES. You have a split opinion even in Region 6?

Mr. PETERSON. Yes. Again, if you are in an area of second growth it is not a big problem. If you are in an area of high-volume old growth timber it is a major problem.

Mr. YATES. Is there a split opinion in the area of old growth?

Mr. PETERSON. No, I think not.

Mr. YATES. The timber industry is opposed to tree measurement.

Mr. PETERSON. Most of our technical people have questions about both the cost and effectiveness of moving in that direction.

ORAL VERSUS SEALED BIDDING

Mr. YATES. Let's turn now to the next item in this report, oral versus sealed bidding.

Why don't you go to sealed bidding? I just talked to the General Counsel of GAO and I said, "Where else in the Government is there oral bidding for any Government contracts?" And he said, "Offhand, I don't know of any."

Mr. **PETERSON**. I would start off by saying that all of our bidding requires a sealed bid.

Mr. **YATES**. Why don't you keep on the sealed bid method like all the other Government Agencies?

Mr. **PETERSON**. Well, let me try to explain this.

Mr. **YATES**. Okay.

Mr. **PETERSON**. When we use the sealed bidding system, people submit bids of at least the appraised price value to begin with; then, in the oral auction phase people continue bidding to compete above the basic sealed bid amount.

In 1976, as a result of the National Forest Management Act, which said that we would use sealed bidding as the principal method, we did go to essentially a major sealed bid system.

What that does, though, in some communities in the West, some companies said we are not able to continue to bid against the competition, and so you have put us in a situation where if we have got timber that we simply feel we have to have in order to keep going you have put us in the situation where we cannot continue to bid.

So in 1978, Congress repealed that position and we now have the authority to use a mix of oral bidding and sealed bidding and this is what we do.

Mr. **YATES**. Is competition strong in Region 6 particularly?

Mr. **PETERSON**. Yes, it sure is.

Mr. **YATES**. Your University of California study on the question of oral versus sealed bidding concludes that oral bidding tends to increase competitive performance in areas where competition is weak.

On the other hand, where competition is strong, sealed bidding does not seem to appear to generate higher bids than oral bidding.

Mr. **PETERSON**. That is right.

Mr. **YATES**. How do they know that?

Mr. **PETERSON**. The analysis that we made is that you can't make an open and shut case. The Government gets more money out of either system because, if you have competition, whether you are sealed bidding, or oral bidding you are going to get the price run up.

If you don't have competition, regardless of what bidding you use you are going to get a bid right at the appraised price. So competition sets the price, not the method of bidding.

Mr. **YATES**. As I understand the law it permits the Secretary of Agriculture to determine which bidding should be used, right?

Mr. **PETERSON**. That is correct.

Mr. **YATES**. And he has determined that in Region 6 oral bidding should be used?

Mr. **PETERSON**. We use a mix of oral and sealed bidding in Region 6, but because we have high competition, there doesn't appear to be any particular advantage to sealed bidding as brought out in your statement from California.

Mr. **McDADE**. Would you yield, Mr. Chairman?

Mr. **YATES**. Sure.

Mr. McDADE. You said the sealed bid has to be at the appraised value. The appraised value, according to the justifications in the testimony, has no relation to what the ultimate bid is.

Mr. PETERSON. This is true, if you have an inflationary situation. Say everybody thinks inflation is going to be 15 percent a year. One guy may think it will be 15, another one thinks 5 and another one thinks it is going to go down; and everyone bids on their expectation for the future. We appraise it on its value today just like you appraise a house.

You appraise a house on what it would bring on today's market. If someone says I can sell that for more 5 years from now, inflation tends to run the price up.

Mr. McDADE. I understand that. But a sealed bid is really not a bid, is it, because what I am trying to say is that once a fellow puts a sealed bid in and the sealed bid is open, then it is open season orally all the way up?

Mr. CROWELL. The oral bid system starts with a sealed bid to guide the people who are then going to be able to bid orally from there. The sealed bid generally comes in at or very near the appraised price and that is the floor from which the bidding starts.

When it is a sealed-bid sale, each bidder only puts in one bid and he bids at the price that he would be willing to pay for the timber that is offered. And so when those bids are open, the high bidder is awarded the sale.

Mr. McDADE. But in Region 6 you really don't have that. You have an entry level where the fellow puts in a bid at today's value.

Mr. CROWELL. There are some instances in Region 6 where the sealed bid is used. So it is only the one bid and the high bidder is awarded the sale.

Mr. McDADE. What kind of area is that?

Mr. CROWELL. Well, they mix them up.

Mr. McDADE. But I don't know whether we have established this as fact or not, but if you have weak competition, sealed bids are often better.

If you have strong competition, oral is the way to go.

BIDDING IN REGION 6

I understand that Region 6 is very heavily competitive. So my question really is whether in Region 6 do you use the sealed bid?

Mr. PETERSON. In fairness, we don't use it very much in Region 6 because it is a highly competitive region and it doesn't offer significant advantage.

I should point out that in any case where a monitoring system indicates that there might be any question that any collusion might be happening, the Secretary has immediate authority to go to sealed bidding in that kind of situation.

Mr. CROWELL. The basic reason for oral bidding is to allow the mill operators, who are dependent upon Forest Service timber, to be able to bid on sales which they may need for keeping their mills open.

In other words, the sales that are closer to those mills would be the ones that they would expect to be able to buy. They want to be able to protect themselves against the competition coming in from outside. They don't want to lose the sale volume to some outsider who may come in on a one-shot deal and be able to take the timber out from under them, in effect.

Mr. **McDade**. I can see how it benefits the receipts of the Treasury but I could also understand from the standpoint of a resource-poor mill operator that he has just got to keep bidding. Somebody can come in, as you say, and wipe him out and from the standpoint of reflecting true value——

Mr. **Crowell**. It gets you back to the point again where with increasing dependence on Government timber as a source for raw material for a lot of the western mills, we need to move the harvest program up so that there is ample timber available and that people are not adding a scarcity premium to their bids and creating an artificially inflated factor there. That can happen in some areas.

The Government can act as a monopolist itself and we ought to be guarding against that.

Mr. **Peterson**. I should point out further that each side of Oregon and Washington have areas where competition is not that strong, and in some of those places we do use sealed bidding.

Mr. **McDade**. Is that in more remote areas? Is that the reason?

Mr. **Peterson**. There is just not as much competition.

Mr. **Crowell**. Often those are areas where the timber is less dense. There is less volume per acre and so it is spread out over a larger area and sometimes, having occasional sealed bids of that sort will allow people to come in from outside and get the chance to see whether we are really getting what those outsiders might be willing to pay.

Mr. **McDade**. Thank you, Mr. Chairman.

Mr. **Crowell**. It is a fine line between acting as a monopolist and acting as a fair seller and trying to maximize receipts under a fair method of Government timber sales. We have to have all of these methods available and use them interchangeably in a way that our timber selling people think is fair, both to the Government and to the prospective purchaser.

FOREST SERVICE TIMBER SALES SINCE 1940

Mr. **Yates**. Here is a report I have from the Library of Congress Congressional Research Service. It is a staff report. It says, "Since 1940 the Forest Service has sold over 358 billion board feet of timber with a bid value total of over $15 billion."

So far we are in agreement?

Mr. **Peterson**. Right.

Mr. **Yates**. "On the other hand the actual cut has been 321 billion board feet which brought in income," not of $15 billion but, "of $9.7 billion." So the value of uncut timber under contract would be $5.3 billion the Government lost.

Mr. **Crowell**. It is not lost. It hasn't been cut yet. I suspect that that total volume figure includes the two long-term sales in Alaska which were made in the fifties and will run, in both cases, for 50 years.

Mr. **Yates**. Why such a long time? I am not aware of those sales.

Mr. **Crowell**. There are some in Alaska. They were done in the fifties with special legislation because the need was to encourage establishment of manufacturing facilities in Alaska. There weren't any significant facilities there and these long-term sales were designed to encourage the construction of pulp mills that can utilize a high percentage of defective timber that was in particularly the Tongass National Forest in southeastern Alaska.

So I suspect that total volume figure since 1940 includes the 8 billion-foot sale to one company and I am not sure what the other figure was, but it seems to me, just guessing, that it was less than 8 billion board feet.

We are only halfway through the contract period and so half of those volumes would still be under contract.

Mr. YATES. What you are saying is that the FS hasn't lost any money then?

Mr. PETERSON. I don't think so. We would like to look at the numbers. You see, there is currently about 34 billion board feet under contract today besides the long-term sales in Alaska. Something close to 50 billion board feet is on the long-term sale in Alaska.

Mr. YATES. The committee report from the investigative staff says, "The above schedule indicates the stability of sold volumes, the decline of the harvested volume and the upward spiral of the average value of MBF of timber sold, the price the purchaser bid for the timber. The bid value has increased from $99.80 per MBF in 1976 to $250.87 per MBF in 1980 or a growth of $151.07 per MBF for a 151 percent increase. Whereas for the same period the value of the timber cut—what the purchaser actually pays for—only reflects a 77 percent growth from $70.89 to $126.01. It should be understood the purchaser only pays the Federal Government for the timber he cuts. To this end the amount sold is, at best, a 'guess' of the potential dollars the Government may receive." Is that true?

Mr. CROWELL. Well, it is more than a guess. It is a good estimate. On sales, at least, the actual total volume which the sale cuts out is determined by the logs that are presented for scaling, plus the merchantable material that may have been left on the ground for which the purchaser is billed at the close of the sale.

There could be and frequently are underruns and overruns on sales that are sold on a log sale basis. It also happens on tree measurement sales but we wouldn't have any record of it because we do not do log scaling on tree-measurement sales as a general rule.

ACTUAL RECEIPTS COMPARED TO CONTRACT PRICES

Mr. YATES. Well, the report goes on further and says, "In all reality the Government very seldom receives the contract value of a timber sale in Region 6. A review of total gross figures from fiscal years 1940 to the present indicates that this 'shortfall' condition in actual receipts compared to contract prices has existed in almost every fiscal year for the combined regions of the FS."

Mr. PETERSON. Well, this is a case where you are trying to compare two different numbers.

What is happening today is the timber that somebody is paying for is probably on a sale that was bought 2 or 3 years ago. What they are bidding today is on sales they are going to be cutting 2 or 3 years from now.

So you get as much as a 6-year lag time between those comparative prices. If somebody tries to compare what we are getting today with bid prices, there is no comparison between the two, especially with inflation running 10 or 12 percent a year.

But, again, the immediate study, I would point out, showed that the difference between our estimate of what would be cut and what was actually cut is one-twentieth of 1 percent on 842 sales, so there is not a big variation. You just compare apples and oranges and get a mismatch.

Mr. **Yates**. What were the apples and oranges?

Mr. **Peterson**. When you are comparing timber based on sales several years ago, sales today, and sales several years in the future, you can't make that kind of comparison.

Mr. **Crowell**. In other words, 1981, for instance, the price paid per thousand would be considerably less than the price bid per thousand on sales being made that year because the sales that are being paid for in which the timber is actually being removed in 1981 would have been sales that have been purchased several years earlier at lower prices than purchasers are bidding on sales in 1981.

TIMBER PURCHASERS WITHHOLDING CUTTING

Mr. **Yates**. How long may a purchaser withhold cutting?

Mr. **Crowell**. It depends on the size of the sale and the complexity of the sale as to how long they are made for. Our sale lengths vary anywhere from 18 months to as much as 5 years and occasionally longer than that.

Mr. **Yates**. Why so long?

Mr. **Crowell**. Well, because if it is a large-volume sale they need more time to operate it. Usually our large-volume sales are made that way because they have large road construction jobs that are associated with them, which also take a lot of time to construct.

Mr. **Yates**. What is considered a large-volume sale?

Mr. **Crowell**. I would say most people would regard a large volume sale as being above 7 million board feet. You could get a difference of opinion about that. We don't commonly make sales in excess of 20 million board feet.

Mr. **Yates**. Someone told me that the purchasers pay capital gains rather than normal income tax on their income.

Mr. **Crowell**. If there is appreciation in the value of the timber between the date that the purchaser contracted for it and the date he actually cuts it, then that difference in value would be measured by capital gain rather than his ordinary profit on the manufacturing of the log into lumber or plywood or any other product at ordinary income rates.

This is pursuant to section 631 of the Internal Revenue Code.

Mr. **Yates**. Isn't it to the best interest of the Government, then, to have contracts that provide for cutting within a short period of time?

Mr. **Peterson**. No, not necessarily, Mr. Chairman. The one thing that you want to be sure of when you have several sales is that there is adequate time to cut the trees on the right-of-way and dispose of that material, to build the road, many times to let it sit through the winter, and be able to get in and move the logs in an orderly way. Plus, the purchaser of the timber can't just automatically force that onto the market at a uniform rate. He needs some flexibility in order to log more one year and less the next, so there is advantage to the purchaser and the Government to have some reasonable length in sales.

ANALYTICAL CONTROLS OVER CUT AND SOLD

Mr. YATES. Let's go back to the Secretary's statement about the statistics I read, and they have included those in the Alaska contract that was 50 years long.

I read again from the Congressional Research Service report. It says on page 2,

> The report shows there are serious variations in volume sold and volume cut, a problem exacerbated by the absence of any apparent analytical controls.

Are there analytical controls?

Mr. PETERSON. Yes, there are.

[The information follows:]

Variations of Volume Sold vs. Cut

The national analytical controls are included in Forest Service Manual 2431.23, Amendment 123. Analytical controls are also, specific for the region or area and guidelines are provided; generally as a regional supplements to national direction. An example of a regional supplement follows. (This example is for Washington and Oregon forests, FSM 2431.23, R-6 Supplement #283):

National direction requires a careful determination of the timber volume to be cut from the sale. All timber volume cruises performed by, or under the supervision of, certified cruisers. There should be sufficient documentation of volume and quality to assure the Forest Service officer authorizing the sale, and prospective purchasers, that the field work has been completed and the data properly handled. The basic field-tally sheets, statistical design and summary tables, are retained for 6 years after the sale contract is closed.

As stated in Region 6 supplement, the direction to national forests in Oregon and Washington specifies that forest supervisors will establish standards for performance of cruise work and the methods to be used. References are provided for the formulas to be used in computing the sample size. Allowable sampling errors for different types of timber sales are also prescribed. The regional direction also discusses the volume tables to be used as well as prescribing how the field work will be checked.

The effort and skills needed to assess a project area will vary depending on the complexity of the sale proposal, its possible environmental impact, status of land and resource plans applicable to the area, current issues and specific management concerns. Based on these variables, evaluation criteria will be developed to guide the level and type of inventory information and resource specialist involvement needed for the environmental assessment. Where such criteria do not exist, line officers are responsible for their development.

Alternatives developed during the preparation of the environmental assessment will vary in their potential consumption of energy resources. Careful analysis, as required by FSM 1951.61 item 8, to evaluate the energy requirements and conservation potential of each alternative will be an important criterion for identifying the recommended alternative.

Sale area design should include the preparation of blue print documents supportive to the environmental assessment. They should contain sufficient site-specific information, preliminary sale design, and management guidance to permit a smooth transition to the next step, sale plan implementation. Details such as approximate cutting unit location, the nature and condition of timber stands proposed for harvest, preliminary silvicultural prescriptions, selected logging systems information, locations of key local roads, planned fuels treatments, location of key resource values, preliminary design for resource improvements, and zones or areas with specific management requirements, constraints, or mitigation measures should be included. This step will include the preparation of a comprehensive transportation plan for the transportation analysis area (Chapter 10, Transportation Planning and Analysis Handbook, FSH 7709.11).

Timber sales generate long-term obligations for the Forest Service, such as sale administration, slash disposal, reforestation, and timber stand improvement. Complete sale planning includes an evaluation of the capacity of the District and Forest organization to meet these obligations promptly and adequately. Documentation of this consideration shall be included in the sale plan environmental assessment. Unless the capability to meet obligations is reasonably assured, the sale should be deferred.

3. The selected logging systems provide the most economical methods of harvesting timber that will accomplish the desired result and produce a quality land management job.

4. Measures prescribed for coordination with other resources have been included in the sale layout and in the contract, where appropriate. For example, ensure that mitigation requirements necessary to reduce impacts of timber harvest and road construction on trails or riparian zones are provided for in the sale design and in the sale contractual provisions.

5. When sale area planning indicates timber should be harvested in the proximity of private land, other Government land, another National Forest or another Ranger District, the Forest Supervisor will ensure that adequate coordination is achieved.

6. Property lines in or adjacent to the sale area have been located and marked to standard (FSM 7153.03 and 7153.46). Provisions must be made to ensure that trees used to mark property boundaries are not left unutilized.

7. All engineering work needed for advertising of a public works contract has been completed and specified road segments have been accurately and separately cruised for volume determination.

8. Measures prescribed for fire protection, erosion control, and other elements of environmental protection have been included in the sale layout and in the contract where appropriate.

Certification that the sale meets the above criteria shall be included in the timber sale report along with the environmental assessment. Approval of the timber sale report with the certification constitutes compliance by the approving officer with the requirements of 36 CFR 223.3 (a) (FSH 1023.4).

Insofar as practicable, sales should be planned so they are economical offerings; that is, they can bear the cost of road construction, slash disposal, and other contractual requirements, and appraise with a normal profit margin.

contract, and if different, also determined for top diameter and utilization standards assumed in the current timber management plan. Computation of cubic volume will be made from measurements taken on the cruise sample trees; average conversion factors will not be used.

Net volumes should be summarized and made available to potential purchasers by tree diameter classes, regardless of the units on which the timber is offered.

Within some sale offerings there may be areas which should be included, but may be of doubtful operability under the conditions prevailing at the time the timber is offered for sale. Such areas may be characterized by difficult logging conditions, a light cut per acre, a high percentage of low-value species, or other factors. Such areas may be included in the sale advertisement (FSM 2431.54, item (e)) and in the sample contract (FSM 2451) on the basis that cutting in them shall be authorized or done only upon mutual agreement between the purchaser and the Forest Service. The estimated yield by species from the additional areas also should be stated in the advertisement and contract.

2431.23a - Final Package Preparation, Review, Appraisal, and Offering. This process includes the preparation of the sample contract and the preparation of the advertisement, bid form, prospectus and appraisal report (FSM 2431.3-5). It involves cost determinations, all necessary maps, and review of the proposed sale and the completed sale package. This activity is concluded with the offering of the completed sale package through advertisement, or notice of availability in the case of a deficit sale.

2431.23b - Bid Opening. This activity includes accepting bids, conducting a sale auction when appropriate, and determining the successful bidder (FSM 2431.59).

2431.23c - Sale Award. This activity involves the work items which follow the determination of a successful bidder. Included are the determination of bidder qualification, EEO clearance, road option investigation and feasibility, and sale award (FSM 2431.7).

2431.23 - Sale Volume Determination. Cruises for obtaining timber sale volume estimates will be designed and carried out using methods and intensities which will aim to produce estimates within plus or minus 15 percent of scale volume.

All cruising will be done by or under direct supervision of certified cruisers. Forest Supervisors will prescribe methods of testing and standards of competency. Regional minimum standards for cruiser competency and for cruiser certification are discussed in FSM 2443.56.

Forest Supervisor will establish standards for performance of cruise work and methods to be used.

One hundred percent cruises will be made for all green sales of 100 trees or less. Sample cruises may be made for larger sales and for salvage sales of dead and down timber. The number of samples needed will be computed using formulas in FSH 2409.22 R6.

The allowable sampling error for cruises will be:

1. For sale where volumes to be paid for are determined by log scaling:

a. ±10%, one standard error, for salvage sales.

b. ±5%, one standard error, for other sales.

2. For tree measurement sales (in which the volumes to be paid for are determined by the cruise rather than by scaling):

±5%, one standard error.

Although a cruise may be designed to achieve the required sampling accuracy, the actual error computed from the cruise data may sometimes exceed the Regional standard. If the computed error exceeds the standard by no more than 25 percent, it can still be considered acceptable. This means, for instance, on a cruise designed for a 5 percent error, that the actual computed error can be as high as 6.25 percent (5% x 1.25). If the error exceeds 6.25 percent, additional sample trees or plots will be needed.

In the case of 3P cruises, additional sample trees cannot properly be selected once the cruise has been completed. If more samples are necessary, the entire cruise should be redone. Thus, it is especially prudent to design 3P cruises so that more sample trees are selected than may actually be necessary.

Forest Supervisor and District Ranger will ordinarily use Mason, Bruce and Girard form class tables which are identified by red, blue, or green covers with the resultant cruise adjusted as necessary on West Side Forests to conform with Forest Service scaling practice. If a special volume table is needed, a request should be sent to the Director of Timber Management.

Volume estimates for any species or species group shall be rounded to the nearest appropriate 100 M board feet in all Regional Forester or Chief sales. For example, an estimate of 9,738 M board feet normally would be rounded to 9,700 M board feet, but if rather liberal defect deductions had been made the estimate could be rounded to 9,800 M board feet. Forest Supervisor should issue instructions covering the rounding of volumes on sales made within their authorization. The recommendation procedure is to round sales of less than 2,000 M board feet to the nearest 10 M board feet and round all others as prescribed for Regional Forester sales. For all sales, identical rounded volumes will be used in the appraisal summary, advertisement, bid form, and timber sale contract. The sale report and appraisal should contain a tabulation showing gross, net and rounded volumes by species.

All timber cruises used in connection with appraisals of timber for sale will be approved for use by a qualified cruiser. The approval will take the form, in each appraisal report, of a statement by a person, designated by the Forest Supervisor, that the cruise work has been examined, meets standards, *- and is acceptable for use. This statement should preferably include approval of the log grading work.

The intensity of examination to be made will be established by the Forest Supervisor. Field examination need not be required for each sale, but should be prescribed for sales of high value, high road cost, and those performed by less experienced cruisers. Regardless of whether or not field checked, each estimate must be compared with volume cut on adjacent areas. Examination should include checking of log grading work. -*

Mr. YATES. What is the nature of the analytical controls?

Mr. PETERSON. We have a standard for size of the sample that would be taken from an area to estimate the volume. We also, for every sale that we make, provide in a closing report the comparison of the volume estimated in the original sale versus what was actually cut. So in every timber sale contract our estimated volume is compared to actual volume cut. Every timber sale that is made includes volume estimated by somebody and verified by someone else.

Mr. YATES. Well, the Congressional Research Service response says: In the Willamette National Forest, 24 Study contracts, for example, Douglas fir, the favorite species which is bid at the highest prices and is 61 percent of the volume sold undercut on contract after contract, overall it undercut by—19 percent. Hemlock, 21 percent of volume sold, undercut by 16 percent.

Mr. CROWELL. That is not surprising, Mr. Chairman.

Mr. YATES. Let me finish. "Cedar was only 1.4 percent of the volume, and is overcut by 9 percent. The only species group to show a consistent overcut. The 'Per Acre Material' was the lowest value material and constitutes 18 percent of the timber sold. Remarkably PAM cut out exactly almost to the estimate time after time."

Mr. PETERSON. That is per acre material. You can estimate acreage pretty accurately. A defect doesn't change the acreage. The amount of acreage doesn't change by the time you get finished. PAM means "per acre material."

Mr. CROWELL. That is the second part of what you read.

In response to the first part of the request, the indication that the Douglas fir and hemlock timber cut out volumes less than we are estimating in the sale is explainable by the fact that these sales are made as log-scale sales, not as tree-measurement sales. So there is no premium on being precisely accurate in estimating the volume that would come from these particular contracts.

The consequence simply is that those contracts turned out to have timber, hemlock and Douglas fir timber, undoubtedly old-growth timber which had more defect than the average stands of timber which had been used to base the estimate on in the first place.

The reason that cedar would have cut out more nearly the estimate is that cedar isn't subject to the same kind of defects and rot. It is a much more rot-resistant species than is Douglas fir or hemlock. Hemlock is particularly subject to rot, and so that is the explanation for the difference. It isn't surprising at all in my view.

Mr. YATES. Well, apparently the staff investigators really didn't scratch anything, according to your answer, when they put in a paragraph like this: "The Forest Service appraised the timber in the contracts, that are listed on pages 23 to 25 in Willamette, for $29,562,819. The high bid purchasers bid $52,498,434 but actually paid $44,881,706 or a 15 percent monetary shortfall on the dollars they contracted to pay."

Mr. PETERSON. Wait a minute. They didn't contract to pay a certain number of dollars. They contracted to pay so much per thousand for material in the trees. When you mentioned the defects earlier or the estimate itself has some variation in it, they paid exactly the amount of money that they should pay for the sale based on the contract.

Mr. YATES. Based on the contract, all right. Perhaps I don't understand. It says here "The high bid purchasers bid $52,498,434." What did they bid that for?

Mr. CROWELL. Well, they bid it on a per thousand rate for a material that was subject to the contract. All of the $52 million represents a multiplication of the price that was bid on a particular sale, times the estimated logging volume in that sale. If the estimated volume is wrong, overstated, then you are overstating the estimated purchase price the Government would realize. If it is understated volume, you are going to understate the price.

Mr. YATES. Is this where the scalers come in to determine the volume?

Mr. CROWELL. No. This is where the defect comes in. When there is a defect in the log, it will decrease the amount that is otherwise subject to being paid for, and that is determined by the scaling process.

Mr. PETERSON. Mr. Chairman, I should point out that the 15 percent difference referred to in the report on those 45 sales is a rather large variation. We normally expect some pluses and minuses. We are doing some followup to determine what was unusual about these sales. It is possible there was a lot of defect not anticipated by the person who made the bid. As I stated 15 or 20 percent in one direction for that number of sales is unusual.

VALUE OF FOREST SERVICE APPRAISAL

Mr. YATES. Well, what value then is the Forest Service appraised bid?

Mr. PETERSON. The estimated volume times the amount bid—as we point out in an analysis of 842 sales, it turned out to be very close. Any 45 sales might be off in one direction because it is just an estimate. It is an estimate that somebody has made by looking at the outside of the tree without being able to see the defects.

Also the estimator is unable to see the top of the trees. The trees are 175 feet in the air, and it is kind of difficult to estimate the condition of the top logs.

Mr. YATES. Maybe you ought to use helicopters.

Mr. PETERSON. Well, you just increase the cost. There is a normal variation of the estimate. You can get it closer but you pay a lot of money for doing that.

Mr. YATES. Well, then, based on your answers, this examination by our staff is an exercise in futility?

Mr. PETERSON. No, I wouldn't say that. I think they properly pointed out the problem due to overbidding and our low estimate of standing timber, and we have just changed those procedures recently. So, the staff dug into a lot of things in a short period of time and pointed out some of the complexities involved.

TIMBER SALE PROCEDURES

Mr. YATES. All right. You have just explained that. Now I look at this paragraph in the CRS report that says, This looks, in a way, analogous to the timber sale procedure. No mill would take an order for 11.5 million board feet at $1.9 million and let the wholesaler come in and pick over the lumber stacks, taking out 9.6 million board feet to pay 30 percent less.

Isn't that what you are doing?

Mr. **PETERSON**. No, sir. That is an analogy that makes no sense at all. In the first place, the guy doesn't get to come in and pick out what he takes. He has to pay the amount that is in the contract for the amount he takes.

Mr. **YATES**. Suppose there is a defect in the log. He doesn't have to take that?

Mr. **CROWELL**. No. But he hasn't contracted to pay for that, Mr. Chairman. That doesn't count in the volume that he has contracted to pay for.

Mr. **YATES**. What you are saying is he has contracted to pay for only sound material and the Government is to absorb the loss for any defects that are in that volume?

Mr. **CROWELL**. Because it hasn't got any value. You can't sell it. It isn't absorbing the loss so much, it doesn't have the value there to sell.

Mr. **PETERSON**. If you went on a gross sale basis, if you said you bid for it all, including the defect, they would just reduce the amount of the bid for the estimated amount of the defect. So it would turn out to be the same.

Mr. **CROWELL**. No, it wouldn't be the same, because there is no way to tell accurately what it would be. So it would cause some real heartburn for a lot of parties to such contracts,. The heartburn would be on the seller when it turned out that the winning bid had estimated a lot more defect than actually turned out to be there, and vice versa.

The heartburn would be for the buyer when he ascertained that he had underestimated the amount of defect and was therefore overpaying for the timber.

Mr. **PETERSON**. I was going to add that it would add a great amount of uncertainty, which would probably adversely affect the bid.

Mr. **CROWELL**. That is right.

Mr. **McDADE**. Would you yield, Mr. Chairman?

Mr. **YATES**. Sure.

Mr. **McDADE**. Go back and lay out for the record, will you, why the statement comparing it to wholesalers is totally inaccurate. Tell us why.

MERCHANTABLE MATERIAL

Mr. **CROWELL**. Because the purchaser, when the timber sale is offered, understands that all he is buying is merchantable or sound material subject to the sale.

Mr. **YATES**. In other words, he isn't buying the whole tree. He is buying whatever is good in that tree?

Mr. **CROWELL**. That is correct. And whatever is good is defined in the specifications of the contract.

Mr. **McDADE**. All right, continue.

Mr. **CROWELL**. Now, the gross volume that is realized from harvesting the trees would include defective material. That would be analogous to the 11.5 in the example that the wholesaler would be offering to make available. But the net volume would be after detection of defect and that would be the 9.6 which is cited in the example.

It would be as though the retailer in the example were coming in and he is agreeing only to pay for the net material. He is not buying it on a gross basis.

Now, you could sell it on gross as the Chief has indicated, but the vast uncertainties about the defect in a particular sale would lead to the kind of unhappiness that I just talked about, some times on the part of the seller and some times on the part of the buyer, because there is no way of knowing exactly what the defect would be until you get a chance to actually look at the logs when they are on the truck, where a lot of scaling is done, or when they are rolled out in the mill yard and it is yard scaled.

Mr. **Peterson**. Carrying their analogy one step further, if I went in to buy some lumber on a wholesale basis, I would buy it on the basis that it meets a certain standard, number one common, number two common, and so on, so I don't in fact take everything that is there. If it doesn't meet the standards, I don't take it, and that is what we are really doing when we sell it.

If a log at the top doesn't meet a standard of being a certain amount sound, he is not required to take it. If it is, he is required to take it and pay for it. So it is the same basis.

DETERMINING MERCHANTABLE TIMBER

Mr. **McDade**. The successful purchaser who harvests the timber doesn't judge the defect, is the Forest Service involved heavily in that?

Mr. **Peterson**. The scaler judges the defects.

Mr. **McDade**. Let's be clear about the fact that if an individual is successful and he goes in to cut timber, that net bottom line figure that becomes the merchantable commodity is not his judgment?

Mr. **Peterson**. No. We judge that.

Mr. **McDade**. Describe the procedure.

Mr. **Peterson**. When we make a sale contract the merchantability standard is stated, which says that the 20-foot log must be at least 25 percent sound. If it is less than that, he doesn't have to take it. There are also certain size limits. We make that determination in the field. If the purchaser doesn't agree with it, he has two choices—to either take it and pay for it, or to leave it and pay for it. Under any circumstance he pays for it.

So he doesn't pick through and decide what he wants to take and only pay for what he takes. That would be ridiculous. So that analogy is way off.

Mr. **McDade**. He must pay at two different values. He either takes it as a merchantable tree or he cuts it in place and leaves it?

Mr. **Peterson**. Under some circumstances if it is a small log, they may require him to leave it. We may make him take it, too.

Mr. **McDade**. There is a salvage value there, too?

Mr. **Peterson**. Right. We reserve the right to either let him leave it in the field and pay for it or to take it and pay for it.

Mr. **McDade**. The judgment you make is an impact on reforestation and, I suppose, other criteria. If he takes it, he pays for it at the rate per thousand board feet that he bids, that is, if you agree to let him take it. If it has salvage value, is it some lesser rate than he has in the bid, or how do you handle that?

Mr. **Crowell**. Well, there is some cull material which he has the option of taking or leaving, and if he takes it, then he pays a lesser price.

Mr. **McDade**. And that is specified in the contract?

Mr. **Crowell**. Yes, and it is usually not bid on. It is just a set rate. It is specified by the Forest Service people in the contract at the very beginning.

Mr. **McDade**. It is verified in the field?

Mr. **Crowell**. Right.

Now, there is another twist to this, and that is that sometimes we require that unutilizable material actually be yarded to a landing so that it can——

Mr. **McDade**. You lost me with the term. What do you mean?

Mr. **Crowell**. It is unsound material which the purchaser doesn't want to take, but it is a big piece of junk and we don't want it left on the ground because it will increase the cost of reforestation, it will cause a fire hazard, or something of that sort. Sometimes it may be saleable in the near future if pulpwood prices were to increase fairly substantially.

So we require that material be yarded to the landing, which is where material is brought either by tractor or by cable, and then ordinarily loaded on trucks. But it is left on the landing, and will either be left there for future sales to pulpwood users if the pulp market is adequate; or more frequently, we have no reason to anticipate that there would be such an improvement to make it worthwhile for a purchaser to come in and take it out, so we just let firewood be cut.

FIREWOOD

Mr. **McDade**. Firewood is getting to be big business. Do they pay for it?

Mr. **Crowell**. In some places they pay for it, and in other places they are doing us a favor to take it, and we let them have it.

Mr. **McDade**. It is less expensive than to haul it.

Mr. **Peterson**. In some situations we would end up spending money to burn it. If we can get someone to take it for fuel, we would obviously do that. In a place where there is a big market for it, we sell it. It is a mixed situation.

Mr. Chairman, maybe we should comment on the Research Service report and look at the numbers, and see if they compare with ours.

Mr. **Yates**. Well, you have answers to the report.

Mr. **Peterson**. I am talking about the CRS report.

Mr. **Yates**. I know you are.

Here are your answers on page 11 of your reply, "Forest Service Plans for Improving The Timber Sales Process. As described above, the final policy for new timber sale procedures was published and became effective on April 15, 1982.

TRANSACTION EVIDENCE SYSTEM

The report states that, The analytical appraisal system is used in all regions but 8 and 9 where the transaction evidence system is used. It further states that The Forest Service has encouraged those regions using the analytical system to begin studies regarding the adaptation of the transaction evidence system for their own use." It points out that "Region 6 when appraising timber for land exchanges, condemnations and trespasses, uses a form of transaction evidence but there is opposition from the timber industry to general adoption of transaction evidence."

The Forest Service comment says, "The report generally describes the situation accurately. Transaction evidence has been used in Regions 8 and 9 because there is a large private land-based market for comparability. The situation in the Pacific Northwest is quite different. The Forest Service believes that transaction evidence is workable in the western Regions. However, there needs to be a much more responsive system developed in the West, especially the California Region and the Pacific Northwest to account for some rather extreme variation in timber quality and costs of production that occur between timber sales there. We have been working with the Bureau of Land Management on a transaction evidence system that might be used in the West."

I don't understand your written reply. In response to the questions which I have propounded this morning, you have nothing in your written reply to point out the discrepancies or the errors in the committee report which you say occurred. There is nothing in this written reply that discusses that.

DISCREPANCIES IN REPORTS

Mr. PETERSON. Yes. On page 1 we point out what you say about the 45 sales may be true, and we are checking up further on that. But the examination by Walter Mead indicates that for 842 sales we are within .05 of 1 percent.

Mr. YATES. But on page 2 you say a study done by the Willamette National Forest shows the sold and cut volumes even out over time. Is that true?

Mr. PETERSON. Yes. That is our general experience, so we don't know why these 45 sales were off in one direction.

Mr. YATES. Well, they are off according to the report. There is a big discrepancy.

Now, when is that going to even out then? When are those discrepancies going to even out?

Mr. PETERSON. As I say, we don't know whether those 45 sales are in an area where the defect is much greater than expected.

Mr. YATES. Well, he just pulled out 45 contracts at random.

Mr. PETERSON. Oh, no.

Mr. YATES. That was my understanding why they took the 45 contracts. What is your understanding?

Mr. PETERSON. That was.

Mr. YATES. On page 21 the report says, "To keep the results of the analysis as statistically viable as possible, the two forest officers were requested to each randomly select approximately 25 recently completed typical contracts."

Mr. **Peterson**. But they tried to expand that to all of Region 6, and this was a random sample on two forests and we would have to look at those two forests to see why it is off in one direction. It could be very easy or difficult to explain. We haven't had an opportunity yet to do that.

But we just pointed out, after checking 842 sales, this pattern had not shown up.

Mr. **Yates**. Well, after all this interchange of questions and answers, I feel as though I have my feet planted firmly in the air. I really ought to take a course in this, I think. I just don't understand the discrepancies that appear in this report, except in the context of this statement in your reply that the study done at the Willamette National Forest shows that the cut volumes even out over a period of time.

You don't say how long it took, and you are telling us the discrepancies appearing in this report will even out over a period of time.

Mr. **Peterson**. Our experience has been in a 2-year period it would even out. Now it may not even out, but it should over a period of time.

APPRAISAL VALUE VERSUS BID VALUE

Mr. **Yates**. How do you account for the differences in the appraisals and the bid value in these contracts? The case I cited showed an appraisal of $19 million, and a bid of $52 million. It is pretty significant. Are your appraisals usually off that much?

Mr. **Peterson**. The appraisal reflects today's market value—our estimate of today's market value. When the bidders then come to bid——

Mr. **Yates**. How much later will that be?

Mr. **Peterson**. It might be a week later. When the people come to bid, particularly if it is a long-term sale, which many of these are, they don't plan to cut it for 3 or 4 years. If they are particularly concerned about the growth area question and that the future supply might be threatened, and they are looking at 10 or 15 percent inflation, and if they really need the timber, some person may bid twice as much, assuming that at a future time it would be worth that much.

Now, because people have done that is why we have the situation where we have all this 10 billion feet under contract that is economically unavailable. It is a speculative kind of bidding.

Mr. **Yates**. How many feet are under contract now?

Mr. **Peterson**. About 33 billion board feet nationwide.

Mr. **Yates**. And you want to increase the cut to 12.3?

Mr. **Peterson**. Increase the sell.

Mr. **Yates**. Even with all that timber under contract?

Mr. **Peterson**. That is not for next year's market. The 1983 sell is for timber that will be harvested in 1984, 1985 and 1986.

Mr. **Yates**. Yes, but you don't know how much of the 33 billion that is under contract may be available 2 or 3 years down the road, too. For all you know, all of that may be available or a great portion of that may be available.

Mr. **Peterson**. Some portion of it. How much we don't know.

Mr. **Crowell**. Ordinarily all of it would be available, but because of the decline in inflation and because of this high bidding, speculative bidding historically occurring in recent years in the west side of Oregon and Washington—what we were telling you yesterday was that as much as 10 billion board feet would not be economically operable even at the highest product prices that have been experienced in the last 5 years.

CAPITAL GAIN PROCEDURE

Mr. **Yates**. Mr. Secretary, let me ask you a question. A few moments ago you testified as to how the capital gains works for the purchaser. He enters into a contract to buy a timber stand for a certain price. He holds it for 3 or 4 years. If the price goes up, he gets the benefit through capital gains at that point, doesn't he?

Mr. **Crowell**. If the value goes up, yes.

Mr. **Yates**. Did you want to say something else?

Mr. **Crowell**. I do, yes, sir. It would be unlikely that the value would go above the price that he had bid in the kind of situation the Chief has just described which affects the 10 billion board feet that we are now dubious about.

Mr. **Yates**. This is true. The only point I am making is this: If he gets the benefit of the increase in value over a period of time, as occurs on some occasions, should he not also take the losses that occur in the event that the price goes down in 2 or 3 years?

RELEASING PURCHASERS FROM CONTRACT OBLIGATIONS

Mr. **Crowell**. Ordinarily he would. He is committed to paying the contract price, and if it is a flat rate sale, that price he bid establishes the price he is obligated to pay whether he cuts it or not. If he doesn't cut it, he defaults on the contract. If the sale is resold at a price higher than what he had agreed to pay for it in the first place, he hasn't measured the damage. If the sale was sold at a lower price, then there isn't.

Mr. **Yates**. Well, what happens——

Mr. **Crowell**. It is the other way around. I am sorry.

Mr. **Yates**. If this is true, why should we pass legislation releasing the contract purchasers from their contracts?

Mr. **Crowell**. Well, we are not advocating at this time that you do pass such legislation. However, if it turns out that——

Mr. **Yates**. I thought yesterday that you had suggested that.

Mr. **Crowell**. All I was saying yesterday was that we are very closely following the situation, keeping up with all of the various conversations and ideas that are being put forward on this, and it may very well be that we would decide it would be a desirable thing to grant some sort of relief through contract terminations in some way.

We don't really have that worked out at this point, nor can we say that we will work it out. But on the assumption, for purposes of responding to your question at this point, that we could reach the conclusion that there ought to be some contract termination relief it would be because of the considerable change in expectations on the part of bidders which the Government has had some responsibility in causing.

In other words, inflation has been, to a significant degree, the responsibility of Government.

Mr. **Yates**. It has also been the responsibility of the private sector.

Mr. **Crowell**. I said to a large degree.

Mr. **Yates**. A large degree by both sectors.

Mr. **Crowell**. I think it has totally been caused by both sectors.

Mr. **Yates**. That is correct.

How would you measure the split?

Mr. **Crowell**. Well, I think that Congress would say that there is a good deal of responsibility on the part of the Government because of monetary policies and——

Mr. **Yates**. Are you a supply-sider?

Mr. **Crowell**. I will tell you this. I am a conservative when it comes to economics.

At any rate, the short answer would be that we do feel that the Government has some responsibility to look to for solutions to this problem because Government is not without fault in having helped to cause the situation.

HOUSING MARKET PROJECTIONS

Mr. **Peterson**. Mr. Chairman, if you can put your consumer hat on for a moment, too, there is a possible problem if a large number of purchasers go bankrupt. This would include a large number of small purchasers who occasionally have various financial problems. There can be a great problem in responding to an upturn in the housing market. We simply wouldn't have the capacity to do it. So that could really make lumber prices extremely volatile.

Mr. **Yates**. Well, was it 2 years ago, Chief, that we increased the authorized cut to 12.3, I think, on the expectation that the housing market would boom?

Mr. **Peterson**. Yes, sir.

Mr. **Yates**. And did the housing market boom?

Mr. **Peterson**. Not yet.

Mr. **Yates**. Not yet.

Mr. **Crowell**. That is a function, I think the chairman knows, of interest rates, primarily.

Mr. **Yates**. It may or may not be. Interest rates are one factor. It may be the private sector as well as the Government that causes that. I was under the impression that some economists had stated that interest rates would follow the course of inflation, that interest rates were a result of the inflationary factor. Inflation has come down significantly and interest rates have not followed.

Mr. **Crowell**. Well, the problem I think is that there is a certain amount of inertia built into interest rates. For a long time when we had increasing inflation, interest rates would not go up because people were not convinced that we were into a semipermanent situation with inflation. Then when lenders did become convinced, they began to add on a factor to their interest rates to protect against inflation.

Today we are seeing the other side of it, when the same kind of inertia is being applied to doubting the fact that we have really cured, semipermanently cured, inflation. So there is some resistance to lenders reducing their interest rates just on a very small amount of evidence that inflation may be under control after all the efforts that have been made.

Mr. Yates. Well, I will accept your answer as one explanation. I have heard others. I think there are as many answers as there are economists. Secretary Regan says the economy is dead in the water. Mr. Weidenbaum says that nothing is moving at the present time.

Mr. Crowell. Either on land or water?

Mr. Yates. Either on land or water, and nobody has lit the lanterns in the north tower.

PER ACRE MATERIAL (PAM)

Let me ask you about per acre material. Do you include the PAM in your volume-sold calculations?

Mr. Peterson. Not usually. If it is nonmerchantable material, we do not normally include it in our calculation. If we think it has some usable volume, then we might include it.

Mr. Yates. Do you have statistics for the period 1976 to 1980 which would indicate the volume and value of merchantable timber sold?

Mr. Peterson. Yes.

Mr. Yates. Would you put that in the record, please?

Mr. Peterson. We certainly will.

[The information follows:]

Mercantable Timber—Sold

Provide volume and value of merchantable timber sold for the period of 1976 to 1980.

Fiscal year	Volume (million board feet)	Value (thousand dollars)
1976	11,823	$801,839
1977	9,920	987,416
1978	10,996	1,328,416
1979	11,330	1,962,624
1980	11,399	1,969,678

TIMBER INVENTORY FIGURES

Mr. Yates. Is it possible that the uncut timber inventory figures are also overstated by as much as 15.8 percent?

Mr. Peterson. No, I do not think that is possible. If you use, again, the Mead study, which uses a much bigger sample——

Mr. Yates. Is it possible the Mead study may be inaccurate?

Mr. Peterson. It has 842 sales over a 2-year period. Statistically, it should be much more reliable. Now based on the Mead study of .05 of 1 percent, it is possible that the inventory is about 8 million board feet and about $2 million off, which would be very close.

Mr. Yates. Is there any impact that the overstatement would have on the allowable cut?

Mr. Peterson. No.

Mr. YATES. And what effect does PAM have on the uncut-timber-under-contract figure?

Mr. PETERSON. None at all.

Mr. YATES. Is the difference in volume a problem in Region 6 or any of the other regions.

Mr. PETERSON. I think you would find the problem in Northern California and some parts of Montana where the amount of defect is very hard to estimate and you have plus or minus in those kind of situations. You find some plus or minus in all regions.

TRANSACTION EVIDENCE SYSTEM

Mr. YATES. Are you converting all your regions to the transaction evidence system?

Mr. PETERSON. No, it is in use now in Region 9.

Mr. YATES. How good is it?

Mr. PETERSON. It is a large private log market, so you have a willing seller and willing buyer kind of thing. In much of the West you are dealing with sort of a semimonopoly situation where the Government would be checking its own prices, so it would be a self-fulfilling prophecy. So you have to have adequate market in order to transact this for it to be usable.

Mr. YATES. Are you going to convert Region 6?

Mr. PETERSON. No. The most likely thing that we would do is in parts of Region 6 where there is an adequate outside market, we might use it in those situations. It has some technical advantages in those situations.

Mr. CROWELL. Mr. Chairman, the difference between the so-called residual appraisal process that is used in Region 6 and much of the West as well, in fact, all of the regions except Regions 8 and 9, and transaction evidence is really perhaps a little bit deceiving because the residual appraisal process is also bottomed evidently on transaction evidence, but transaction evidence is from the finished product. Then the rest of the transaction evidence comes from data collection of costs from operators who have extended contracts and are required under the terms of the contract to supply their cost data.

So you can see that those represent a myriad of transactions as well. Then that data is aggregated, and it is then used in performing the residual appraisal process. So, when you use the two terms, you can be misled into thinking of them as being rather distinct kinds of processes but they are really shades of the same process; namely, transaction data.

CHECK SCALING

Mr. YATES. How frequent do you engage in check scaling?

Mr. PETERSON. Well, as I mentioned earlier, that is a random system, unannounced system. If we checked a scaler and found that he was off above the limits, we would probably make a surprise inspection at a closer interval to find out if there is a problem there.

Mr. YATES. Have you ever found that to be the case?

Mr. PETERSON. Oh, yes. We found some scalers who had that; yes.

Mr. Yates. Tell us the circumstances. Are you talking about Region 6 now?

Mr. Peterson. I am just talking in general about scaling.

Mr. Yates. Let's talk about Region 6.

Mr. Peterson. I don't know whether they discharged anybody in Region 6.

Mr. Yates. Well, do you have check scaling in Region 6?

Mr. Peterson. Yes, I would expect we have.

Mr. Yates. Could somebody tell you whether you have?

Mr. Peterson. We are not sure here, but we will find out for you.

Mr. Yates. Well, if you don't have, you sure ought to have, shouldn't you?

Mr. Peterson. Have what?

Mr. Yates. Check scaling.

Mr. Peterson. Oh, yes, we have check scaling in Region 6.

Mr. Yates. How often do you engage in check scaling?

Mr. Peterson. We have check scalers throughout Region 6 who are performing randomly unannounced check scales, so we check scale every scaler on a periodic basis. But we don't do it every month. We might do it a week apart, so he doesn't get used to any pattern.

Mr. Yates. How many check scalers do you have in Region 6?

Mr. Peterson. Generally we have a regional check scaler in charge at the regional office in Portland, and we would have probably 20, I would guess, maybe 20 check scalers. At least one per forest.

Mr. Yates. At least one scaler per forest?

Mr. Peterson. One check scaler per forest.

Mr. Yates. Is that enough? The forests are pretty big, aren't they?

Mr. Peterson. Well, they are not that big.

Mr. Yates. A million acres, isn't that big?

Mr. Crowell. A check scaler would move around. He would perform his work wherever third party scaling or Forest Service scaling was being done. We had better supply for the record the number that we have for each forest.

[The information follows:]

Number of check scalers by national forests in Region 6

Forest:	*Number of check scalers*
Deschutes	1
Fremont	1
Malheur	1
Mount Hood	2
Ochoco	1
Rogue River	2
Siskiyou	1
Siuslaw	1
Umatilla	1
Umpqua	2
Wallowa-Whitman	1
Willamette	2
Winema	1
Colville	1
Gifford Pinchot	2
Mount Baker-Snoqualmie	2
Okanogan	1
Olympic	2

Forest:	Number of check scalers
Wenatchee	1
Regional office (assist certain forests as needed)	3
Total	29

Mr. Yates. I would like to know what your check scale schedule has been, say, over the last couple of years in the forests of Region 6.

Mr. Crowell. I suspect that the data will show that the forests that have the largest sale volume would also have more check scalers.

Mr. Peterson. We would not want to publish the schedule of the check scaler.

Mr. Yates. Well, not for the future. Do you follow the same kind of schedule in the future that you do in the past?

Mr. Peterson. No, we do not.

Mr. Yates. Then what difference does it make?

Mr. Peterson. We would give you the frequency of the scale and give you ideas of how it is organized, and we will give you the standards for the system.

Mr. Yates. All right.

[The information follows:]

Check Scaling.

The National Direction for Check Scaling is included in Forest Service Manual (FSM) 2443.54, Interim Directive 43. The check scaling direction for National Forests in Washington and Oregon is included in FSM 2443.3, Region 6 Interim Directive No. 38, and FSM 2443.54 Region 6 Supplement No. 232. These references follow:

2443.5 - Standards in Scaling. National Forest timber will be scaled in units of measure and by such methods as are specified in the contract. As a general rule, sawtimber is sold by the board foot and pulpwood by the cord or cubic foot. Standard units for other products will be railroad ties by the piece of stated minimum size; mining timbers by the piece or linear foot; telephone poles by the linear foot or by the piece of stated length; piling by the linear foot; pulpwood by the solid cubic foot or cord; and fuel wood, shingle bolts; and similar material by the standard cord of 128 cubic feet. Regional Foresters may authorize exceptions.

As a general rule, the basis for measurement of National Forest timber is the form in which the material leaves the woods and not the amount of finished product which may be manufactured from it. Volume determinations by the amount of lumber sawed out by the purchaser will not be used, except in extraordinary circumstances. Measurement of end products, particularly for small sales of minor products of low unit value, may be made under such conditions and circumstances as are approved by the Regional Forester. Products such as telephone poles, hewn ties, and fenceposts are ordinarily finished for market at the stump, and are therefore usually measured or counted in their final form.

2443.51 - Scale Rules. The Scribner Decimal C log rule, the Forest Service International 1/4-Inch Decimal log rule, the International 1/4-Inch log rule, or the Cubic Volume rule, each as used by the Forest Service, will be used uniformly for scaling all sawtimber. These rules may also be used in preparing volume tables for estimating National Forest timber.

2443.52 - Overrun. (National Forest Log Scaling Handbook, FSH 2409.11.)

2443.53 - Numbering and Stamping Logs. (National Forest Log Scaling Handbook, sec. 56.2.)

2443.54 - Check Scaling. All levels of field organization (Ranger, Supervisor, and Regional Forester) will participate in log check-scaling activities to ensure protection of the Government's interest. However, compliance with frequency standards and initiation of corrective action when necessary are basic responsibilities of the District Ranger.

All scalers, regardless of whether they are independent-third party scalers or Forest Service, will be check scaled at least twice per year and more frequently if they are scaling different species and under different conditions. New scalers will be checked once each month during first 2 months of duty. If a check scale indicates a scaler is outside the acceptable limits of scale variance, he will be checked again within 2 weeks and monthly thereafter until variance is consistently within acceptable limits.

Regional Foresters will establish frequency standards for checking third party scalers. Volume and value of material scaled should be considered in establishing standards which will adequately protect the interest of the Government.

Ordinarily, 100 to 200 separate pieces constitute a satisfactory check scale. However, the check scaler should individually analyze more complex situations and determine the need of more comprehensive check scales. For example, variance of scale by particular species or types of defect may require more intensive check scales. Where long logs are scaled, each long log is considered one piece rather than the segments into which it may be divided for scaling.

The original scale will be compared with the scale of the check scaler and the results summarized on a form approved by the Region for that purpose. One copy of each check-scale summary (FSH 2409.11, sec. 65, ex. 2) will be furnished the Regional Forester, Supervisor, Ranger, and scaler currently as made. A copy of the summary will be made available to purchasers promptly upon request also. *-A log-by-log detail should be furnished the purchaser and purchaser associations, when arrangements for providing each other such information can be made.-*

At the end of the calendar year each Supervisor will furnish the Regional Forester a summary sheet listing the results of all check scales conducted on the Forest during the year and identifying each check scale by scaler, Ranger District, check scaler, and date of check scale.

Except as modified below, the following standards of accuracy are established for acceptable Forest Service scaling. Check scales showing variances beyond the following limits indicate the need for immediate administrative attention and training to return the scaler's work to within these limits.

The original net scale is considered acceptable Forest Service scaling when it is within:

1. 2 percent of check scale on logs up to 10 percent defective.
2. 3 percent of check scale on logs 11 to 20 percent defective.
3. 5 percent of check scale on logs over 20 percent defective.

Percentages applied above refer to the overall defect percentage of the sample used in the check scale. They do not refer to percentages applied to individual logs or groups of logs in the check scale. Only in those instances where a sufficient number of logs in a defect group will form a fully adequate sample should any attempt be made to apply the percentages to defect groups within the check scale.

In scaling logs on the water in some situations the above Forest Service scaling standards cannot be met. This scaling is customary in Alaska and the Douglas-fir region. A tolerance not exceeding ±5% for these situations (only) may be approved by the Regional Forester. Standards for acceptable scaling bureau scale are established in the scaling agreements and are generally ±5%.

Other situations where the standards prove difficult to meet (as in some long-log truck scaling) are generally deficient in proper scaling arrangements, such as fully adequate platforms, lighting, equipment, or training. Analysis and correction of such deficiencies rather than relaxation of standards is approved practice.

Adequate training of scalers combined with check scaling as described above should make it unnecessary to adjust the original scale. Such adjustments may be needed, however, where the original scale was fundamentally wrong in method or in treatment of important defects. Changes in original scale will be made only when specifically authorized by the Regional Forester.

2443.55 - Scaling Complaints and Adjustments. Prompt action will be taken when scaling complaints are received or anticipated. Facts must be obtained and the adequacy of the scale verified, ordinarily by check scale. If the resultant check scale shows the original scaling has been fundamentally wrong in method or in treatment of important defects, corrective action will be taken immediately. An adjustment in recorded scale may be made. Regularly scheduled check scales which show the original scale to be outside acceptable limits (FSM 2443.54) will require (1) careful analysis of the original scale for fundamental error, and (2) considering the same action as is appropriate for a complaint by the purchaser.

If a purchaser has a scaling complaint, he should be requested to submit it together with substantiating evidence, preferably in writing, to the responsible Forest officer, generally the District Ranger. Upon receipt of such complaint, the responsible Forest officer will initiate an investigation promptly. The purchaser will be notified of the results of the investigation and the planned followup action.

Check scales made to determine validity of complaints will generally be more extensive than routine check scales (FSM 2443.54 and National Forest Log Scaling Handbook (FSH)). When findings developed from regularly scheduled check scales indicate a scaling error exists, it is advisable to make an immediate followup check scale by either the same check scaler or another qualified check scaler (FSM 2443.56), preferably without the knowledge of the scaler. Consideration may be given "outside" check scales which the Forest Service is satisfied are made by qualified scalers who are essentially independent, unbiased, and accurate.

If the fact developed by check scale indicate that fundamental errors in scaling have been made, the scale may be adjusted by rescaling all of the logs or a statistically sound sample. If this cannot be done, adjustment may be determined by the Regional Forester on the basis of available information, including the check scale. If the basis for an adjustment is the check scale itself, it must be recognized that such scale usually includes only a limited number of logs rather than statistically sound samples of logs being scaled, and also that compensating scaling differences may exist. Intensive check scales may be directed to selected logs which represent the fundamental error. In all cases, final decision to make an adjustment will be based not only on the percent of error as shown by the check scale, but also on the type and magnitude of errors which the check scaler finds have been made. Every case should be considered on its own merits.

The following guidelines are for use when the extent of a scaling error cannot be clearly established by the scaling records and an adjustment must be related to the check scales:

1. Adjustment only when check scales are outside of acceptable limits.

2. Adjustment only when a fundamental error is established.

3. Adjustment either up or down.

4. Adjustment for half the volume scaled by an individual scaler between an acceptable check and the next preceding acceptable one when the period of error cannot otherwise be established.

5. Adjustment by species whenever the check scale indicates the error is related to an individual species.

6. Adjustment to zero rather than to acceptable limit.

7. Adjustment currently rather than waiting until the end of the season.

8. Adjustment for all sales to which the check scale is directly applicable.

9. Adjustment by individual scalers.

Adjustments involving unusual circumstances will be made by the Regional Forester on the basis of the available information.

If it is determined that the variance in scale by a competent scaler is primarily due to the method of presenting logs for scaling and the method in use has been established at the request of the purchaser, no adjustment in scale will generally be made without an adjustment in the form of a new and more favorable scaling location. For example, too rapid presentation of logs on a mill deck; trucks loaded in such a manner that species defect and diameter cannot be accurately determined.

If the existence of a scaling error can be clearly established by the scaling records, a correction should be made in the original scale even if the volume of material check scaled is, as a whole, within the acceptable limits for the volume as originally scaled. For example, a consistent mistake may have been made in determining species sold at different rates.

Such corrections are in a different category than the adjustments previously discussed. Corrections of this nature may be made by the original responsible individual or his superior.

The basis for adjusting scaled volume must be recorded in a memorandum report, approved by an officer authorized by the Regional Forester. The report should summarize the adjustment of volume by species. The summary data will be recorded on an adjustment timber sale statement of account and entered in the purchaser's account. Copy of adjustment timber sale statement of account will be provided purchaser and, if requested, a copy of the memorandum report may be provided him.

2443.56 - Scaler Cerfitication Programs. Regional Foresters shall establish certification programs for the principal measuring methods used in their Regions. The objectives of such programs will be to (1) obtain uniform and accurate volume determination, and (2) enhance the status of Forest Service personnel working in the timber management field. The programs shall provide for (1) basic training, (2) provisions for checking and measuring competency, (3) issuance of certificates, (4) refresher training, (5) certification renewal, and (6) action in case of unsatisfactory performance. Certificates should provide for name, certification level, Region of sub-Region, date, and by whom certified.

The certification program for log scaling shall recognize a minimum of three levels of competency; qualified scaler, advanced scaler, and master scaler. New scalers must be qualified for certification as qualified scalers before being assigned to scale saw logs for payment or volume table purposes. Experienced scalers may be certified at their proper levels of competency. Check scalers on forests with light timber workloads must qualify as advanced scalers. Check scalers on forests with heavy timber workloads should generally be master scalers. Additional levels of competency may be established by Regional Foresters.

Minimum requirements for the three levels of competency follow:

1. Qualified Scaler - The minimum program requirements for a qualified scaler shall provide for (1) instructions in the fundamentals of scaling, (2) passing grade on a written examination on scaling fundamentals, (3) a period of practice scaling with an advanced or master scaler, including a training comparison on at least 200 logs, (4) one or more mill visits with an advanced or master scaler, (5) an acceptable check scale by the Forest check scaler or his designated assistant under working conditions comparable to the planned assignment, and (6) the issuance of a certificate of competency by the Forest or zone check scaler.

2. Advanced Scaler - The minimum program requirements for an advanced scaler shall include: (1) acceptable check scales by the Forest or zone check scaler during a normal field season or its equivalent, (2) an acceptable check scale by the Regional check scaler, and (3) issuance of a certificate of competency by the Regional check scaler.

Specific requirements pertaining to length of service and number of acceptable check scales (FSM 2443.54) should be established by the Regional certification program.

For purposes of certification, zone or area check scalers who serve as part of the Regional Forester's staff will generally be considered as Regional check scalers.

3. Master Scaler - Master scalers shall be designated by the Director, Division of Timber Management, Washington Office. Regions should make periodic recommendations as needed.

2443.6 - Recording

2443.61 - Scale Records. Regional Foresters should specify the approved scalebooks to be used in the Region. Use of duplicate or triplicate scaling-record forms will facilitate centralized maintenance and audit of scale records and provide for preservation of records in the event one copy is destroyed or lost.

Scale records will not be entered in other notebooks or on loose slips of paper to be transferred to scalebooks later except under conditions where the cost of scaling would otherwise be materially increased or the purchaser seriously inconvenienced. Temporary scale records must be transferred to regular scale records as soon as practicable and the temporary records fastened permanently to the page of the scale record upon which the entries are made. When duplicate or triplicate record books are used, such temporary records should be attached to the audit copy so the accuracy of the transfer entries can be checked. A complete, clear, legible copy of the scale records, or the original scalebook records for all advertised and unadvertised sales will be filed in either the Ranger's or Supervisor's Office as determined by the Regional Forester.

2443.61a - Check of Scale Records. The term "check of scale records" refers to testing for accuracy of timber sale volume records. The records to be tested include, but are not necessarily confined to, (1) basic scaling records, such as scalebooks, scale tickets, and consumer scale tickets, (2) the extensions which convert measurements into MBF, cubic feet, or products as recorded on the basic scale record, and (3) the summarizing of basic scale into internal record systems and the customer record.

1. Objective - The objective in requiring checks of sale volume records is to ensure that:

   a. Volumes to be paid for are correctly reflected in the timber sale statement of account so that the customer is billed for the correct amount.

   b. Errors are promptly detected, corrected, and recorded.

c. The appropriate officials are promptly informed of the existence of errors to permit them to take corrective action of cause as well as results.

2. Responsibility - Because scaling conditions vary widely between different localities, no one standard system would be suitable for Service-wide use. Each individual Region will develop and publish specific instructions for its own area.

2443.61b - Principles. The basic principles essential to any system of sale volume check meeting the above objectives include:

1. Independent Verification - The individual performing any phase of checking must always be someone other than the person who made the original entries, conversions, or computations.

2. Qualification - The individual performing the check must be qualified in the area of his examination. Persons who perform sample check of addition in scalebooks need not necessarily be conversant with contract volume determination requirements. However, those who supervise checks of sales must be aware of all possible documents which could affect final volume determination and provide for their submission for checking.

3. Impartiality - Detected errors are to be corrected irrespective of whether the corrections benefit the Government or the purchaser.

4. Feedback - An adequate checking system provides the appropriate field officer with current information as to the quality of scale records. It will bring to his immediate attention errors indicating deficient scaling performance, recording, or computation. This principle is essential to good sale administration. Feedback delayed for an extended period results in continued poor performance, an excessive number of corrections, and may adversely affect customer relations.

5. Economy - Rigid systems, requiring a high percentage of checking in all cases, are not economical. A system should provide for thorough checks of essential or important areas and less intensive checks in less sensitive areas. It should provide for more intensive examination when errors are discovered.

Skilled professional or technical personnel generally should not be used for checking in an area in which clerical employees are competent. Good instructions will help in applying this principle.

6. Sequence - Related to economy is the principle of sequence. The system shall provide for documents to be examined in logical sequence, providing the greatest control with reasonable effort. A check of volume records shall always be completed before a sale is closed and refunds made.

a. When feasible, volume records should be checked before the statement of account is prepared.

b. For contracts which provide for price escalation, there shall be a complete check of volume records at the end of each quarter. Prompt checking and correction of errors tends to reduce further errors arising from the complexity of retroactive volume and value adjustments.

c. Volume records should be checked before a third party agreement is consummated (FSM 2433).

7. Comprehensiveness - Volume checking systems shall ensure that all areas of volume determination are tested and that each area is properly related to the others. The principle cannot be emphasized too strongly. A system is incomplete if it merely ensures that scalebooks are verified, but does not ensure that they are properly summarized into the final record.

The system should include the following provisions:

a. A control record is kept to ensure that all basic scaling documents and all volumes included in the basic scale records are included in the summaries. See comments in sec. 55.65 of FSH 2409.11, National Forest Log Scaling Handbook, concerning the use of a journal for summarizing basic scale records.

b. Where sampling is involved, the check shall include verification of sample volume computation, verification of sample to total ratio, and recomputation of computed volumes.

c. Where adjustments in volume arising from fundamental scaling errors (FSM 2443.55) are involved, all computations are to be audited before submission to Regional Office.

8. Documentation - The substantial amount of money involved in timber sales justifies requiring good documentation. Good documentation includes the following:

a. Scale records should be legible. Scalebooks or other scale records with smudged, or otherwise illegible, entries do not provide a satisfactory record and should not be tolerated. See comments concerning accuracy and legibility in sec. 55.6 of FSH 2409.11, National Forest Log Scaling Handbook.

b. Basic scale records should bear complete designation entries. They should show the case designation, scaling date, and name of scaler. Where applicable, entries for page number, compartment, and block should be complete. If sample measurement is involved, the sample ratio (10-1, 20-1) should be shown on appropriate documents. Where totals are taken to another scaling document, as part of a summary for a cutting period, there should be complete cross-reference entries. For example, "Totals to page 8, book 'H' "and "Totals from page 37, book 'F'." Where summaries are made for transfer to a statement of account an entry shall be made on the basic scale record and summaries to indicate on which report the volume summarized is included. In like manner, an entry shall be made on the report to show from which summary records the reported volume originated.

c. Erasures should not be permitted. Changes in original entries should be made by lining out original entries and reentry of revised figure.

d. When scale volume records are checked, the examiner should initial and indicate on the document that a check has been made. Date check was made should be recorded. Original entries should not be erased when errors are found. Line through the erroneous entry and make the corrected entry in a distinctive color.

e. Adequate documentation includes a record showing which documents have been examined and the correct volume figures as determined by the checking process. This record should ensure (1) that all basic volume documents related to the sale have been checked, and (2) that the volumes in sale records agree with volumes as verified or corrected.

The record of verified volumes can take different forms. Whatever form is established, it should reveal clearly which volume records, that is, what pages of which scalebooks, or similar information for other basic scaling records, are included in a given reporting period. It should show whether all of these records have been examined. Finally, it should reflect the correct total volume, as confirmed or corrected by checking, that should be reported in the reporting period.

f. Where the checking involves Forest Supervisor or Regional Forester sales, both the Forest Supervisor's Office and the District Ranger's Office will be kept informed of checking progress. This may be done by preparing two copies of the document which records the fact and date of checking, and the volume as originally recorded and verified or corrected. One

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CHAPTER: 2440 - DESIGNATING, SCALING, AND RECORDING

POSTING NOTICE: Last ID is No. 37 in FSM 2430

REMOVE: ID No. 31 to 2443.02 (This is a reissuance of ID No. 31 dated October 22, 1980 with no substantive change in text.)

2443 - SCALING AND MEASURING SALE PRODUCTS AFTER FELLING

2443.02 - Policy. It is the policy of the Pacific Northwest Region that National Forest logs will be scaled by Forest Service scalers or approved third party scaling organizations in accordance with log scaling rules published in the National Forest Log Scaling Handbook (FSH 2409.11) or, when specified in the Timber Sale Contract for West Side sales, the Official Log Scaling and Grading Rules as supplemented by R-6 FSH 2409.11

Scaling shall be accomplished as soon as practicable after removal from sale area as designated in A14 of the Timber Sale Contract or at approved alternate scaling locations. A scaling zone established for each National Forest will define the limits within which timber will be scaled unless the Regional Forester agrees otherwise.

Subzones, within a National Forest scaling zone, will be established when needed to provide reasonable travel distances for administration, reduced administrative costs and reduced risk for log accountability.

Unscaled National Forest logs may travel from one scaling subzone into a second scaling subzone before being presented for scaling. Unscaled logs may not travel across more than one subzone boundary.

Where it is necessary or desirable to revise scaling policies or scaling zone boundaries applicable to a Forest, the change will normally be applicable only to new sales and sales extended after the change in policy has been made public. A major change in scaling policy will be announced by a general notice to all timber Purchasers at least 90 days prior to implementation and subsequent timber sale prospectuses and contracts will appropriately reflect the change.

This policy will apply to all timber sales advertised after September 30, 1979. Administration of log accountability and scaling on timber sale contracts advertised prior to October 1, 1979, will be in accordance with the requirements expressed in those contracts.

2443.21 - Responsibility. The Forest Supervisor is responsible for the establishment, administration, and periodic review of log accountability procedures and for volume determination for timber sale contracts and permits on a National Forest.

2442.3 - Log Accountability on Scaled Sales

4. - Scaling Zones. Each National Forest will have an established scaling zone within which all National Forest timber cut from within the zone, under timber sale contracts or permits requiring scaling advertised after September 30, 1979, will be scaled unless waived by the Regional Forester. When necessary, the Forest Supervisor will submit to the Regional Forester a recommendation for scaling zone changes. When approved by the Regional Forester, the Forest Supervisor will establish the zone by Manual supplement and notify prospective Purchasers. Unless otherwise approved by the Regional Forester, any changes from the previously established zone will be applicable only to sales advertised during the period for which the zone is established.

The zone boundary will be established so as to encompass all needed scaling sites so located and with sufficient capacity to accommodate adequately the volume which, on the basis of the timber resource plan, is expected to be scaled during the planning period. The zone will also excompass those locations, such as Purchasers' yards, which are known to meet objectives discussed in Item 2 below, and, therefore, may be considered favorably as alternate scaling locations upon request. The scaling zone should not encompass an area greater than that in which log accountability can be maintained. When subzones are established within a forest scaling zone, unscaled logs may not be transported across more than one subzone boundary.

Scaling zones and subzones applicable to sales advertised after September 30, 1979, are shown on Pacific Northwest Region Scaling Zone Map dated July 1, 1979. Copies of this map are on file in the Regional Office (Timber Management) and in each Forest Supervisor's Office.

a. Coordination Among Forests. It is the responsibility of the Forest Supervisor to coordinate scaling procedures, including the establishment of the Forest scaling zone, with procedures and zones established on adjoining National Forests or Regions. The primary concern is to achieve as much informity in the protection of the public interest and the treatment of individual timber Purchasers as the timber and geographic conditions permit.

To such end, adjoining Forests or Regions may establish overlapping zones where it is logical to do so. Where common scaling locations are involved, Supervisors may agree to logical division of the work to be done specifying which Forest will administer the yard agreement. Such agreement cannot eliminate the responsibility for administration under each timber sale contract as outlined in the parent text.

b. Scaling Locations.

(1) Designated Scaling Location. Scaling locations to be designated in timber sale contracts (A14) must meet (or be capable of meeting if presently undeveloped) all of the objectives listed below:

(a) The location must provide for scaling as soon as practicable after removal from sale area and must permit remote check scaling. For those presently approved scaling sites where remote check scaling facilities are not established, scaling wil be permitted to continue for the duration of existing contracts where the scaling site is listed in A14. Alternate scaling sites, not providing remote check scaling facilities, will be permitted to continue for a period not to exceed 1 year during which time facilities for remote check scaling will be developed or scaling at the alternate sites will be discountinued at the expiration of the period.

Where remote check scaling facilities are lacking, Forest Supervisors will work with timber sale contract Purchasers and owners of log collection sites to establish facilities such as truck platforms or bunks to hold truck loads of logs as a unit.

(b) The location and physical arrangement of the facility must permit safe, accurate and efficient scaling, and meet acountability standards for the timber projected to be scaled at the location.

(c) The location must be available without discrimination for scaling by other Purchasers of sales within the logical tributary area. In obtaining scaling at the site, Purchasers must not be required to lease property or equipment of a third party. Thus, neither an individual mill yard nor a communtiy having several mill yards may be designated, because such a location or locations are not open to all prospective Purchasers.

(d) Standards for scaling accuracy and log accountability can be monitored and administered by the responsible Forest officers.

(2) Alternate Scaling Sites. Forest Service normally will agree to an alternate scaling site when such a site can better serve the Forest Service needs, or if the Purchaser shows the A14 location cannot meet his needs. Examples would be: (1) not on proposed haul route where the use of the A14 location would involve a substantial backhaul, (2) scaling facilities are inadequate due to size, etc. Where it is reasonable to do so, more than one alternate location may be approved, but scaling at more than four locations during any one reporting period for any one sale should be approved only in unusual circumstances.

A yard scaling site within the scaling zone may be approved by the Forest Supervisor if it meets the conditions of (1)(a), (b), and (d) as discussed above, if it meets Regional and Forest yard scaling specifications. The yard scaling specifications are covered by the Memorandum of Understanding for Yard Scaling, R6-2440-71. Approval may be given for the scaling of a Purchaser's logs at an approved yard scaling site within a scaling zone (subzone) subject to the limitation on total number of scaling locations as discussed above. Generally, approval for yard scaling may not be granted where loaded trucks bypass an open-unit scaling station. With respect to a given sale, an "open" scaling station is defined as a truck scaling station approved for use for scale of National Forest timber with unrestricted use by all Purchasers and sufficient capacity to handle the volume from the sale.

When scaling zones of two or more Forests overlap, and requests for alternate scaling sites include the same yard scaling facility, the Forests involved should agree and sign one R6-2440-71 Memorandum of Understanding for Yard Scale with the yard owner. The Forests involved should consider the additional volume impact on the site before approving it as an alternate scaling site for a given timber sale contract.

Past practices and established yards should be considered, but the approval of yard scaling facility as an alternate scaling location for one or more sales does not constitute approval of that location for any subsequent sales, nor does the presence of a third party scaler in the Purchaser's yard constitute an acceptable reason to accept that yard as an alternate site.

(3) Approving Locations Outside the Scaling Zone. Requests to the Forest Supervisor for scaling at locations outside of the scaling zone will be forwarded to the Regional Forester, together with the Supervisor's report of the facts and his recommendation.

The Regional Forester generally will approve such a request where the Purchaser demonstrates he cannot use existing facilities within the zone and proposes acceptable measures he will take to permit the Forest Supervisor to maintain the same control of log accountability as possible at the A14 site.

When requests for scaling at locations outside the scaling zone are made, it is incumbent upon the Purchaser to establish that existing scaling facilities within the scaling zone are clearly impractical for the sale involved. In addition, the Purchaser must include proposed practices or procedures in the request that will be followed by the Purchaser to assure meeting accountability standards.

As in the case of approval of alternate sites within the scaling zone, approval for one or more sales will not constitute a commitment for approval applicable to all future sales.

c. Scaling Systems and Procedures. Scaling systems and procedures shall comply strictly with all contract requirements pertaining to utilization standards and volume determination.

(1) Truck Scaling - Scaling platforms or scaling stations shall be located to control log accountability and permit the check scalers to make remote check scales. Centralized scaling stations will be used wherever possible to reduce the cost of scaling. Sample scaling should be considered where many small or low value logs are to be scaled. The timber sale prospectus will state the location for scaling. The location selected for scaling should be as close as possible to the sale area and located so loads of logs must pass the scaling point enroute to their destination. All truck scaling station locations on common carrier roads will have written approval of the State or County Highway Department prior to any construction. Stations must be so located that trucks will not cross traffic lanes to reach the scaling platform. Road distances at scaling stations must be adequate to allow all trucks to park clear of main road traffic.

When alternate scaling locations have not been approved and truck scaling is the approved method of scaling for a timber sale, the Purchaser shall be required to present logs for scaling at the first open scaling station in operation.

Approval for Purchaser to temporarily bypass the first open log scaling station and present logs for scaling at the next open log scaling station on the haul route may be granted by the Forest Supervisor when log scaling station overloads occur during peak production periods.

(2) Yard Scaling - All yard scaling facilities must meet Regional and Forest yard scaling specifications and shall be inspected and initially approved for use by the Forest Supervisor upon recommendation by the Forest Check Scaler. The following are of particular importance:

(a) Suitable scaling bays and sufficient space for log storage outside the scaling area are essential for yard scaling.

(b) Adequate control of unscaled loads must be maintained. Limit number of loads depending on yard size. Overloading yard with unscaled loads will not be permitted. Special provisions to accommodate sample scale may be necessary.

In areas where a scaler is covering two or more scaling yards, the three remote load minimum (Item #11, R6-2440-71) may be reduced in yards having four or less single load scaling bays. Yards that have room for more than four single load bays will not be excused from the three remote loads required without prior Regional Forester approval. The reduction of three remote loads can be accomplished in the Memorandum of Understanding for Yard Scaling, Form R6-2440-71, by the use of Item #20.

The check scaler should not arrange for the holding of additional remote loads by telephone.

(c) Where yards have both ground and truck scaling facilities, truck scale in the yard may be permitted on a sale-by-sale basis, only if:

> The logs are destined for other points and remote check scaling can be accomplished.
>
> An operating truck scaling station is not by-passed, except in those cases where the station is temporarily overloaded and written approval has been given by Forest Supervisor to by-pass the manned truck station.

(3) Mill Deck, Jack Ladder, Water or Chain Scaling - Proposed mill deck, jack ladder, water or the expansion of chain scaling will not be approved in Region 6. Existing chain scaling facilities must be brought into conformance with all current requirements for scaling National Forest timber in order to continue an approved alternate scaling site.

d. Scaling Administration. To achieve scaling objectives each scaling site must be administered. This includes visits to inspect conditions affecting accuracy of scaling. Visits must be made at the start of sale operation, at the beginning of each season and periodically during the scaling season. The frequency of visits will be based on the inspector's judgment of need, but generally should be at least monthly.

(1) Monitoring: The following items will be monitored:

Presentation of logs for accurate scaling.

Excessive dust or mud.

Changes in yard and/or site arrangements.

Yard operations.

Safety of operations.

Sampling procedures.

Purchaser interference.

Scaler's work load.

Scaler's information form.

Indications that scaler may not be able to perform; example - illness, fatigue, etc.

(2) Inspections: Periodic inspections of scaling sites will include monitoring log accountability procedures. As a minimum, include the following:

Handling of load receipts, R6-2440-81.

Log painting and branding.

Handling of sample scaling procedures, including adequate separation of sample scale loads from nonscale loads.

Export and substitution surveillance, including looking for logs from other National Forest areas which could signal a change in tributary area and might indicate a violation of substitution restrictions.

When unsatisfactory conditions are found, the party resposible shall be notified of the condition for immediate correction.

Unless otherwise designated by the Forest Supervisor, the scaling site inspections and administration will be done by the Forest Check Scaler for consistency. The inspector will report his finding on the Yard Scaling Inspection Report, R6-2440-72, to the Forest Supervisor who will initiate corrective action through the Memorandum of Understanding for

Yard Scaling, R6-2440-71. Copies of inspection or a letter will be sent to the Purchaser when appropriate. The Regional Check Scaler is available to assist in questionable cases. If the inspector finds unsatisfactory conditions pertaining to log accountability, branding and painting which are the responsibility of the Purchaser, they will be referred to the FSR on the contract for dispostion.

e. Log Branding and Painting. The following standards are established for log branding and painting for scaled and tree measurement sales advertised after September 30, 1979, where products were removed from sale area in log form:

(1) West Side Forests - Olympic, Mt. Baker-Snoqualmie, Gifford Pinchot, Mt. Hood, Siuslaw, Willamette, Umpqua, Siskiyou, Rogue River.

All logs shall be hammer branded on both ends and painted with highway yellow paint on both ends.

(2) Other Forests

(a) All logs shall be hammer branded on both ends and painted with highway yellow paint on both ends on all timber sales where:

Logs are to be hauled to destinations west of Cascade Range.

Logs are to be hauled to destinations where historically National Forest, private or state logs have been removed and hauled to other destinations outside the Forest's scaling zone.

Logs are transported to a port facility along the columbia River system. A port facility is described as being a log handling point adjacent to the water's edge designed for depositing logs into a raft, barge, or ship.

(b) Single end branding and painting of all logs will be the adjusted standard when all the above conditions under e(2)(a) above do not apply.

(3) All Forests - Hammer brands referred to above will be State registered brands acceptable to the Forest Service. Normally, the brand size will be a minimum of 2 inches in size but no larger than 2-½ inches An acceptable brand mark will be the full brand impression on the log end. Yellow paint referred to above will be a minimum area equivalent to a 2-inch circle on the log end(s).

(4) Forest Supervisors may reduce branding and painting requirements on sales of distressed timber. A minimum of ten logs per truck load will be branded and painted on at least one end on any such reduced requirements.

To qualify for a reduction in branding and painting requirements, a timber sale must meet all the following criteria:

More than 50 percent of the total sale volume is distressed timber.

Average appraisal volume is less than 50-board feet per piece (load and haul estimate).

Regional established cost of branding and painting all logs on one end equals or exceeds average stumpage value.

Surveillance of operation can be maintained by Forest personnel ceilings and budget.

When a proposed timber sale meets all the above criteria, the prospectus will indicate that less than 100 percent and painting may be permitted if:

(a) There is no history of export from the vicinity of the mill where logs from the sale will be delivered for manufacturing, and

(b) The intergrity of each load can be maintained prior to scaling. The use of false bunks in a yard or some other method must be agreed to that will assure log accountability when intermittent scaling is practiced, as a conditon of any waiver.

(Continued on next printed page)

2444.1 - Audit Team Make-up. The audit team shall consist of at least two and preferably three members. The team leader shall be a member of the Forest Supervisor's staff. The other members may be from Ranger Districts except that none may be connnected with the District being audited. As a minimum, timber management and resource personnel shall be on the team. At least one team member shall have a good knowledge of the Forest Service log accountability requirements and some familiarity with scaling techniques. Law enforcement personnel should be included on the team whenever possible.

2444.2 - Frequency of Audits. The minimum standard is one audit per District per field season.

2444.3 - Standards for Conducting Audit. Audits shall be unannounced although efforts should be made to make sure that key people will be available. Audits should be conducted during periods when log movement is occurring. As a minimum, audit team will review the following items:

1. The controls exercised over load receipts.

2. The frequency of checks of loads for proper use of load receipts and documenation of such checks.

3. Adherence to contractual requirements for branding, painting. Check special requirements where Contract Provisions or agreements provide for such.

4. Compliance with contractual requirements for route of haul, presentation for scaling and any special requirements established by contract or agreement.

5. Where sample scaling is used, check for maintenance of integrity of sample load selection system, frequency card issuance controls and storage and retrieval of frequency cards.

6. Where third party scaling is used, check for adherence to agreement requirements.

7. Check progress in meeting the goals established for training in prohibited acts and law enforcement.

8. Check contract administration by the FSR in the area of log accountability and of undesignated tree cutting by the Purchaser.

2444 - Objective. The objective of measurement audits is to ensure that the Government is receiving full value for timber removed from National Forest land.

More specifically, these objectives are:

1. To ensure that the operation of log accountability system on each National Forest in this Region conforms to National and Regional direction.

2. To evaluate the log accountability system for deficiencies which could lead to loss of Government property and to identify needed changes in direction.

3. To review the operational aspects of scaling for deficiencies which could lead to under or over payment for National Forest logs.

4. To ensure that action taken against violators of log accountability provision conforms to standards.

5. To evaluate other aspects of sale administration which could lead to under payment for timber or the cutting of undesignated trees.

2444.03 - Policy. An audit of log accountability shall be conducted at least once a year on each Ranger District by the Forest Supervisor.

2444.04 - Responsibility. Forest Supervisor shall:

1. Conduct the annual audit of log accountability on each Ranger District.

2. Submit copies of such audit reports to Regional Forester.

9. Check on handling of timber trespass cases.

10. Check procedures used to accumulate, store, summarize, audit and certify scale data submitted to TSSA.

11. Verify accuracy of scaler information forms against timber sale contract specifications.

12. Check procedures used to document, follow-up and resolve missing log load receipt cases. (FSM 2443.3, item 2.f.)

13. Check on District policy on limit of Log Load Receipts Books to be in possession of Purchaser at any one time.

14. Check on receipt, documentation and timeliness of TPSO notification of changes made on scale tickets subsequent to transmittal of scale ticket to District Ranger by TPSO.

15. Additional items established by Forest Supervisor.

Audit teams shall file a written report with the District Ranger and Forest Supervisor. The Forest Supervisor will forward a copy of the report to the Regional Forester after review and possible comment.

JEFF. M. SIRMON
Regional Forester

2443.54 - Check Scaling

1. Organization Guidelines. Check scales will be made by Forest and Regional Scalers to assure that acceptable measurement standards are being met. Each Forest Supervisor should have available the services of *- a Forest check scaler. At the present time two Regional -* scalers are assigned out of the Regional Office to cover all of Region 6.

The top job priority of the Regional Scalers will be to maintain a quality scaling performance of Forest Service and Bureau scalers and to help solve the field problems. They will serve as liaison officers between the Bureaus, Forest Service, and Industry. Supervisors should make *- use of the Regional check scalers' knowledge in training forest check scalers, check cruisers, and sale administrators -* in handling log accountability and utilization problems. Regional check scalers will visit the Forests *- and will work closely with the Forest check scalers. -*

Forest check scalers should assume the full load of check scaling the Bureau and District scalers who are scaling National Forest logs for stumpage payments. The job of training and check scaling at the Forest level is the responsibility of the Forest Supervisor. Refer to FSM 2443.56 for Certification of Scalers.

2. Check Scaling Standards. The defect deduction percentage for the combined species volume checked will be the base factor for check scale comparisons (FSH 2409.11, National Forest Log Scaling Handbook). Guidelines for satisfactory net scale variances will be developed from this factor beginning with a ± 2 percent variance for defect up to 10 percent. In cases of defect over 10 percent, the variance will be determined by multiplying the defect percentage by 0.2 (2/10). Example: 0.2 x 33.6 = 6.72 percent.*-The allowable percent variance is always based on the check scaler's percent defect.-*

All check scale report comments should be specific in pointing out deficiencies and the corrective training *- needed on Forest Service scalers or action taken with Bureau scalers.-*Check scale report form R6-2440-27 and supplemental form R6-2440-27a will be used for all check scale reports. Confidential information will be recorded only on the supplemental report form.

Check scale results will be rated on the basis of data submitted. Three classifications will be recognized: satisfactory, acceptable, and unacceptable.*-The classification will appear on both the R6-2440-27 and 27A Check Scale Report.-*

The following guidelines, in addition to those in the parent text, will be used in evaluating any check scale.

a. Satisfactory. All elements of the report are within approved limitations. This will include a reasonable comparison of the number of logs by species, the total number of logs, and the defect deduction volumes. Gross scale volumes will generally be within one percent variance or otherwise justified. Net scale variance will be within satisfactory limits. Generally, no corrective action will be needed.

b. Acceptable. One or more of the satisfactory check scale elements are not within approved limitations or are not otherwise justified. However, the net scale variance should still be within satisfactory limits. *- Corrective training in all cases with Forest Service scalers and corrective action with Bureau scalers will be required. -*

c. Unacceptable. One or more of the above satisfactory elements are not within approved limitations, or otherwise justified, and the net scale variance is outside satisfactory limits.*-Corrective training in all cases plus administrative action will be required on Forest Service scalers and corrective action on Bureau scalers.-*

Refer to FSM 2443.55 for adjustment procedure when appropriate.

3. Remote Check Scaling. All check scales made on Bureau scalers, except as provided herein and in FSM 2443.65, will be made without the knowledge of the original scaler. This method is known as remote check scaling. All check scales made on Forest Service scalers will be remote checks whenever possible. Satisfactory remote check scaling is possible only where a check scaler, without advance notice, may scale each and every log or load of logs, independently after the original scale has been made.

Scaling locations and facilities shall provide opportunity for check scalers to obtain remote check scales for the following minimum quantity of logs at each visit made for checking purposes at any time:

a. For truck scaling at other than recognized central stations, two truck loads of logs scaled before the scaler has opportunity for knowledge of the check scaler's presence; provided, that this minimum may and should be increased for locations that involve abnormal travel time by the check scaler. Minimums for truck scaling locations apply for normal hauling periods. Locations should permit minimums greater than two loads of logs during peak hauling periods and less than two during slack periods.

b. For dry land or yard scaling, three or more loads of routinely scaled logs. Sufficient bays for unloading and storing for scaling and check scaling without loss of load identity must be provided. Scaled loads available for checking should be the last three scaled at any time.

* * * * *

All check scales will be made as nearly as possible under conditions which are the same as the original scaling. If truck scaling, all logs on trucks will be scaled but not partial loads. In making comparisons, truck scale will
- not be compared to yard scale, yard to mill deck, etc., unless authorized by the Regional Forester. -

Comparative results from remote check scales made in truck scaling or yard scaling may be accumulated over a period of time to indicate trends. Check scalers may find it advantageous to combine a remote check and a check in the scaler's presence; this data should be shown separately on the Check Scale Report, form R6-2440-27. A combined check scale report summary will be classified as satisfactory when the summary results meet standards for satisfactory check scaling and if the net scale variance between the remote and direct check scale is less than 7.5%. When the variance between a remote and direct check scale equals or exceeds 7.5%, the check scale will be considered as having an unsatisfactory scaling condition that requires corrective action. In some cases the variance may make the check scale unacceptable. In special situations, approved by the Regional Forester, where it would be impossible to make a remote check scale, the in-place check should include at least 50 M board feet, net scale and from 100 to 200 pieces (not segments). A remote check of one or two loads of logs would not include a sufficient volume to constitute a normal check scale. However, by comparison, a remotely scaled load or two could indicate a poor scaling practice by the original scaler. Problems with gross measurements, defect deductions or species identification may be found. Corrective action should be taken or requested as necessary. However variances based on an inadequate sample are not to be used as sufficient evidence to warrant any scale adjustment. See FSM 2443.55.

Since mill deck scaling precludes any opportunity for a remote check scale, additional checking procedures should be used. Some are:

Frequent comparisons of defect percentages.

Batch checks on prescaled logs.

Closer check on log accountability to see that all scaled logs are charged to proper sale.

Training and scale comparisons will be made prior to the time a scaler is actually scaling and charging logs against a sale. See FSM 2443.56.

Check Scale Reports, forms R6-2440-27 and -27a are valuable management tools for the District Ranger or other administrative officers controlling scaling work. The reports must be submitted to the proper officer within two weeks from the time the check scale was made, and sooner if results show need for corrective action. Corrective action must be taken immediately and follow-up checks made to assure correct scaling. Check Scale Report procedure for Bureau scalers is found under FSM 2443.65.

A check scale should cover all species-products scaled during the period of the check. Each item should be shown on the check scale report, form R6-2440-27. When logs unmerchantable because of defect and logs classed as older dead are being removed and charged for at a separate rate, they should be included on the check scale report as a separate summary by species, number of logs, and gross volume.

Check scales made by the Forest Service on Forest Service or Bureau scalers will made availabe to individual purchasers upon request.*-Check scale report information furnished a purchaser will include all of the elements on the Check Scale Report, form R6-2440-27.-*

* * *

2443.55 - Scaling Complaints and Adjustments. The accuracy of scaling for payment purposes should be investigated when a purchaser complaint alleges that scaling has been unsatisfactory, and when a routine check scale indicates the original scale was outside acceptable limits.

In cases of purchaser complaint, the Forest officer should determine the basis for alleged errors in scale. He should establish whether the difference is based on cutout recovery or by comparison scale for a given number of logs. In either case, details and facts must be obtained. Where a comparison scale is the basis for complaint, scaling rules and methods used must be known to determine if the scaling was done properly. A copy of the purchaser's comparison scale should be obtained if possible and used to determine specifically the sources of variance.

For routine check scales that indicate unacceptable variance, an analysis of the contributing factors will be made to determine if adjustment action should be required in addition to corrective training (FSM 2443.53). Scale adjustments will be made only when clearcut evidence of unacceptable scaling is available. Each scale adjustment case will be considered on its own merits.

The Washington Office guidelines 1 through 10 will be used in cases warranting consideration for scale adjustments. In situations not covered by these instructions, advice should be obtained from the Regional Forester.

Special Regional guidelines will be:

1. Examples of fundamental errors are the incorrect identification of species or the erroneous interpretation and application of an approved scaling rule.

2. When routine check scales have established the need, the Forest Supervisor must initiate voluntary scale adjustment.

Scale adjustments should be recorded on a special Statement of Account (cutting report). Supporting data outlining the reasons and procedures for volume determination will be shown on a supplemental report. All adjustments exceeding $1,000 in stumpage value will be referred to the Regional Forester for review and approval.

2443.56 - Timber Measurement Certification Programs. To assure both Forest Service and purchasers uniform and accurate scaling, any Forest Service employee who may be assigned to regular log scaling shall first have met minimum training requirements. He may be conditionally certified to scale for stumpage payments until he is certified as a qualified scaler. Regular log scaling is any scaling done as a basis for stumpage payments at a point agreed upon by a purchaser and the Forest Service.

Incidental scaling of lost logs, or damage and waste scaling in connection with sale administration, may be done by other personnel if they have been trained in the fundamentals of scaling and the District Ranger is satisfied with their competence to do such work.

Personnel conducting check scales must meet the mininum requirements for Advanced Scaler referred to herein as Forest Scaler, or Master Scaler referred to herein as Regional Scaler.

1. Log Scaling. R-6 levels of competency follow :

a. Qualified Scaler. Any employee assigned to the primary duties of scaling for payment purposes, regardless of his tenure of position.

(1) Basic Training. All new scalers, including those assigned for relief scaling, will receive two weeks of intensive training. The first week will be spent in the fundamentals of scaling and in mill visits. The second week will be spent in apprenticeship scaling at an active scaling point to apply scaling techniques and develop skill.

(2) Training Personnel. The first week of training will be under the direction of the Forest Scaler. The second week may be under the guidance of the Forest Scaler or a Qualified Scaler with recognized training abilities.

(3) Comparison Scales. During the period of apprenticeship, sufficient comparison of the trainee's scaling results will be made to determine his abilities to scale, or to detect areas in which he may need additional training. Two or more comparisons of 50 M board feet or more should be obtained.

(4) Written Examination. Within the basic training or apprenticeship period, the trainee will complete a written examination on scaling rules and practices.*-A grade of 75 percent will be considered passing.-*

(5) Period of Training. It will be the responsibility of the Forest Scaler and the apprenticeship instructor to determine the trainee's scaling abilities at the conclusion of the minimum training period. Results of the written examination will also be considered. Basic training will be continued when necessary.

(6) Initial Assignment. Upon recommendation of the training personnel, the new scaler will be assigned to stumpage scaling upon conditional certification. He will receive two standard check scales by the Forest Scaler within one month, or in scaling one million board feet, whichever occurs first. Total volume of the two check scales will be used to determine his scaling performance. Where judgment dictates the apprenticeship or conditional certification period can be extended and additional spot training and check scales continued until the trainee has fully demonstrated complete competency.

(7) Certification. Completion of the above training, apprenticeship period, and satisfactory check scales as outlined, will justify formal certification at the first level. This certification will remain in effect until revoked by cause or superseded by a higher certification level.

(8) Special Rating. Qualified Scalers who have had satisfactory scaling performance records over a period of 5 years or scaling seasons, will be designated as Senior Qualified Scalers.

b. Advanced Scaler. An experienced scaler who has been assigned the duties of a Forest Scaler and whose primary duties will be the training of new *- scalers and the check scaling of qualified Forest Service and Bureau scalers at the Forest level. -*

Scalers in this level will be recruited from the ranks of Qualified Scalers, Professional Foresters, or Forestry Technicians.

(1) Training Abilities. Eligible personnel for this level must have demonstrated a pronounced ability to train and instruct.

(2) Experience Record

Qualified Scaler - Will have had 4 years certification at this level.

Professional Forester - Will have had 2 years experience in timber management activities; also, the equivalent of 1 year volume determination experience in scaling, cruising, or tree measurement sales.

BEST COPY AVAILABLE

Forestry Technician - Will have had the required number of years of general experience in accordance with Civil Service qualification standards for the grade of the position, including at least 2 years experience in scaling, cruising, or tree measurement sales.

(3) Probational Assignment. Meeting the above requirements, a scaler may be assigned the duties of Forest Scaler on a probational basis. During his first three months of assignment he will receive one or more standard check scales by the Regional Scaler in each of the scaling methods employed on his Forest. Total volume of the check scales will be used to determine his scaling performance.

(4) Certification. Upon demonstrating satisfactory scaling performance and ability to handle training and other duties of this assignment, the scaler will be certified at the level of Advanced Scaler. This certification will remain in effect until revoked by cause or superseded by a higher certification level.

c. Master Scaler. An experienced scaler who has been assigned the duties of Regional Scaler, and whose primary *- duties will be check scaler training and check scaling on the -* Regional level.

Scalers in this level will be recruited from the ranks of active Advanced Scalers or otherwise qualified Professional Foresters.

(1) Experience Record

Active Advanced Scaler (nonprofessional) - Will have had certification in this level for at least the 4 prior years.

Active Advanced Scaler (professional) - Will have served the prior 2 years in this level.

Other Professional Foresters - Will have had a previous 2 years certification as an advanced scaler in addition to 4 or more years experience in timber management activities or related work.

(2) Qualifications. Scaler will have had the scaling background or have demonstrated the ability to satisfactorily scale all species under all scaling methods and conditions occurring in the area or subregion to which he is assigned.

(3) Certification. Scaler will be regularly check scaled by Master Scalers in his area or Region, pending certification *- by the Regional Check Scaler. Certification will remain in -* effect until revoked by cause or assignement to other duties.

d. Certification Procedure. Certification of stumpage scalers will be made by Forest Supervisors. Certification of Forest Scalers will be the responsibility of the Division of Timber Management, Regional Office. Area Scalers will also be certified by the Division of Timber Management, and Regional Scalers will be certified by the Chief's Office. Check scales made for certification purposes will be recorded using R6-2440-27 and -27a. The responsible offices will complete and submit the following forms (samples) for Regional Office approval:

R6-2440-25, Individual Check Scale Record

R6-2440-134, Certification Record

After the approved Certification Record has been returned, the responsible office will issue to the scaler:

R6-2440-133, Timber Measurement Certification

R6-2440-31, Scaler Competency Card.

e. Effective Date. All scalers will be certified, as outlined, on or before September 15, 1965.

f. Cancellation. When a certified scaler's performance becomes substandard through a series of unsatisfactory check scales, two consecutive unacceptable check scales, or a fall-down in other phases of his scaling responsibility, he should be temporarily relieved of scaling duties. Depending upon the circumstances involved, the follow-up training and the re-examination results, he may again be assigned scaling duties.

Failure to re-establish his scaling abilities will cause his certification to be permanently revoked.

g. Refresher Training. It will be the responsibility of the Forest Supervisor to determine the extent of refresher training necessary before reassigning a qualified scaler to active scaling after a layoff period. In some cases, it may be advisable to begin the reassignment with apprenticeship scaling. Efforts should be made to give relief scalers frequent opportunities to apply their training and to schedule check scales at the same time. An important phase of the certification program will be to maintain the caliber of scaling when relief scalers are required. Relief scalers should be permitted to scale 8 hours per month or 20 loads in one period.

*- Sample

INDIVIDUAL CHECK SCALE RECORD

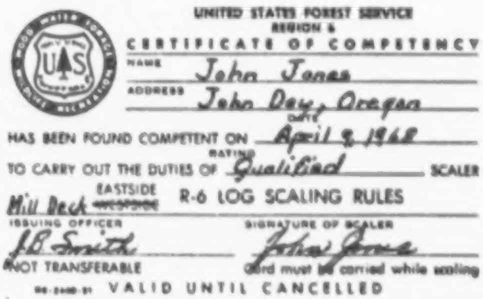
Scaler: Bureau: Forest Service Forest:

Scale Date	Check Scaler	Type of Scaling	No. Logs		Gross Volume		Net Volume		% Defect		% Variance (Show + or -)	
			Sc.	Chk.	Scale	Check	Scale	Check	Sc.	Check	Gross	Net
COMPARISON CHECK SCALES												
9-27-67	F.S.	Truck	126	126	60.34	60.02	54.28	54.14	10.04	11.44	+0.53	+0.26
10-4-67	F.S.	Yard	135	135	64.08	63.77	61.54	61.22	3.96	3.99	+0.49	+0.52
REGULAR CHECK SCALE												
10-14-67	F.S.	Truck	222	222	119.02	118.68	93.15	92.86	25.87	25.82	+0.29	+0.31
10-24-67	F.S.	Truck	255	256	90.79	91.13	84.44	85.25	6.9	6.4	-0.37	-0.95

Form R6-2440-25
Revised 3/25/60

(Continued Over)

Sample



UNITED STATES FOREST SERVICE
REGION 6
CERTIFICATE OF COMPETENCY
NAME John Jones
ADDRESS John Day, Oregon
DATE
HAS BEEN FOUND COMPETENT ON April 9, 1968
RATING
TO CARRY OUT THE DUTIES OF Qualified SCALER
Mill Deck EASTSIDE ~~WESTSIDE~~ R-6 LOG SCALING RULES
ISSUING OFFICER
J.B. Smith
SIGNATURE OF SCALER
John Jones
NOT TRANSFERABLE
Card must be carried while scaling
[illegible] VALID UNTIL CANCELLED

-*

*- Sample

United States Forest Service
Region Six

TIMBER MEASUREMENT CERTIFICATION

Employee's Name

The above named individual is certified as meeting Regional standards in the following types of timber measurement:

Eastside Scaling - Truck and Yard

CERTIFICATION RECORD:

Qualification	Certifying Officer	Original Issue Date	Expiration Date
		11-1-67	

APPROVED:

Signature	Title
	Date

R6-2440-133 (5/65)

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Exhibit 1

CERTIFICATION RECORD	IN SERVICE ONLY Forest should submit to Regional Office in triplicate. One copy will be returned to show R.O. action.	2440

Forest	District	Date 11-1-67
Employee's Name	Title	Present Assignment

Level of Certification Requested Qualified Scaler	Sales Handbook Section Showing Standards Met 2443.56--1 1a

Summary of Qualifying Training and Testing

Show Handbook Section and Outline Designations, Summarize Qualifying Experience, Training and Test Results. Also Show Name of Instructor and Date Item was Completed. Use Back of Form if Necessary.

1950-1960	Timber Falling Bucking and Marking in the Pine Sub-Region
1960-1967	Worked for U.S. Forest Service (Fire Control & Presale)
9-6-67	80 hrs. of Intensive Training by Forest Check Scaler
9-17-67	Eastside Test given by Forest Check Scaler Grade 85
9-24-67	Assigned to Apprenticeship Scaling for Two Weeks under Supervision of the Head Scaler
9-27-67	Comparison Check Scale by Forest Scaler
10-4-67	Comparison Check Scale by Forest Scaler
10-10-67	Assigned to Stumpage Scaling under Supervision of Head Scaler
10-14-67	Check Scaled by Forest Scaler
10-24-67	Check Scaled by Forest Scaler

All work performed satisfactorily.
See attached check scale record.

Certification of Accuracy:

Signature of Employee		Signature of Certifying Officer	
Title	Date	Title	Date

Approval

Regional Office Action	☒ Approved	☐ Disapproved	☐ Returned for Information	Explain unfavorable action briefly in remarks section.

Remarks Approved for qualified scaler for Eastside Yard and truck scaling.	Signature
R6-2440-134 (5/65)	Title Date

Mr. YATES. What does the check scaler check? He has a contract which shows the size of a certain log and he has a report by your bureau scalers as to what their conclusions are on size or volume, and he will check to see the accuracy of that?

Mr. CROWELL. What he would do, Mr. Chairman, is the logs would be separately identifiable. They would be tagged. And so when the scaler, whether he is a third-party scaler or Forest Service scaler, scales those logs, he keeps track of what volume he assigned to the log, gross volume, defect and net scale.

Then the check scaler would not necessarily need to have access to, and probably would not have access to, the tag or the scale record performed by the original scaler. He would just perform a separate scale, fill out the same kind of form, and then the two would be later compared. The check scaler is generally a very highly certified and skilled scaler. He is experienced, at least more experienced than the scaler he is checking. So if a significant difference shows up over a fair volume of scalings, any scalers can differ about the measure that they would assign to a particular log, so you have to do it over a reasonable volume to constitute a fair sample.

Then, if the check scaler's volumes turn out to be outside the acceptable range of error or difference, then there would be some further investigation made of the skills of the scaler who had been checked.

Mr. PETERSON. The normal standard is 2 percent, by the way. It is a very close standard. The check scaler normally does not know what volume the previous guy assigned to it. It is a completely independent scale. There is also a question of species identification. You may have a scaler who can't consistently identify the species.

Mr. YATES. The investigative staff says, check scalers very seldom see a log scale variance in favor of the Government. The overwhelming majority of the variances are within acceptable levels, but almost always favor the contractor.

Mr. PETERSON. I talked to Mr. Housley, Deputy Chief of the National Forest System, who has more than 30 years experience in this, and he says the check scaler who could consistently stay within the 2 percent and still go on one side or the other, they don't think it is feasible. That just doesn't appear to be possible that he could consistently be still within the limits but still in one direction. That would take a fantastic kind of capability.

MOUNT SAINT HELENS SALVAGE

Mr. YATES. Let's talk about Mount Saint Helens salvage for a moment. In Region 6 several of your appraisals are lower than the highest bid. We found that in other places, too.

For example, 4,512 percent difference in sale number 57; a 4,000 percent difference in sale number 5. Why do you think this disparity exists, or existed?

Mr. CROWELL. Mr. Chairman, I don't understand the question. I am sorry.

Mr. YATES. The difference between the appraisal of the value of salvage on Mount Saint Helens timber. The appraisal was off by 4,500 percent. My question is: Why did that happen?

Mr. PETERSON. I think your investigator did point out that there was something there that we should change, and that is some people did bid on a species that gave a very high amount when we should have provided that those be bid at a fixed rate. We are currently requiring that those be bid at a fixed rate. We are currently requiring that those be bid at a fixed rate. That is just a fluke, really, of those minor species.

SKEWED BIDDING

Mr. YATES. The Forest Service knew about it and then along comes other sales. The high bidder for Douglas fir, a fairly valuable species, isn't it, didn't receive a bid because the successful bidder skewed the bidding by bidding up the less desirable and deteriorating hemlock. As a consequence, the government did not receive the proper value for the more valuable timber.

Mr. PETERSON. You can't make that latter conclusion, because you don't know the value of the timber until the sale is completed. Now they have jumped to a conclusion based on the idea that those species will be lower than others. It may turn out that the reverse is true. But in order to prevent skewed bidding from doing that type of thing, we now require the minor species that are subject to deterioration be bid at a fixed price and that is our policy.

Mr. YATES. No more skewed bidding?

Mr. PETERSON. That policy was made following that case. We have now straightened that out.

Mr. YATES. To what extent did the other salvage sales reflect skewed bidding?

Mr. PETERSON. On Mount Saint Helens it will not happen where we have the fixed price as we have now. This was some of the earlier sales.

Mr. YATES. Did it happen subsequently?

Mr. PETERSON. Not since we changed to the fixed price.

Mr. CROWELL. We have still got quite a bit of volume to sell this year on Mount Saint Helens, and I suspect that the volume that that occurred on, the volumes sold, would have been relatively small. It shouldn't have happened in the first place. We got outsmarted, I suspect.

ESTIMATING DEFECT

Mr. YATES. Is there a cruising problem on Mount Saint Helens and Willamette sites?

Mr. PETERSON. We think there might be a problem of estimated defect. It takes experience to estimate defect accurately. You may go into an area and think there may not be much defect there, and you have to have a sale or two to show you that you have it.

So we are going to follow-up on those particular sales on the Willamette to see what happened.

Mr. YATES. Well, I had assumed that in your appraisal your appraiser would take into consideration the possibility of a defect. Is that correct?

Mr. PETERSON. Sure.

Mr. YATES. It is an average figure that he puts into it.

Mr. PETERSON. But suppose you use that average figure and on Willamette, I don't know what it is, but there is about a 15-percent defect on the average. You might go in and make a sale on part of the Willamette and suddenly run into 30-percent defect in a particular situation.

Mr. CROWELL. An example of that might be what is known as shake in some trees. You can't see that. It doesn't show up until the tree is actually felled and opened up. Then it is apparent. It is caused by damage to the tree from wind, and it will destroy the fibers and make it unmerchantable. In a situation like that, an extreme situation you can have a very high volume affected and very much more defect than anybody would guess. That is unusual to have it to that extreme, but it is possible and has happened on Willamette.

Mr. YATES. The wind causes the trees to sway and breaks the fiber?

Mr. CROWELL. Yes, sir. It breaks the fiber, and that isn't apparent from the outside.

Mr. YATES. Do you have an estimate of what the actual dollar loss of cruise in the area is?

Mr. PETERSON. I just pointed out that maybe 0.05 of 1 percent, and it isn't really a loss because we actually collect what is there. That is an estimating error.

Mr. YATES. How do you compute that?

Mr. PETERSON. Per acre.

Mr. YATES. How do you determine what is PAM?

Mr. PETERSON. When we go into a sale area and make an estimate of the volume there, there may be a lot of logs laying on the ground collected over a period of time, that may be partially rotten. There may be some standing trees that we also think will be cull material. So we look at that and say we will sell all of this unmerchantable material on a per acre basis, and estimate the acres involved and sell it on that basis.

Mr. YATES. Is it possible for merchantable logs or trees to be included in that——

Do you have any questions?

Mr. AuCOIN. Mr. Chairman, I understand that you did ask some questions with regard to the salvage operation on Mount Saint Helens.

SALVAGE OPERATION ON MOUNT SAINT HELENS

Mr. YATES. Yes, I did. Did you want to followup on that?

Mr. AuCOIN. Yes, I would like to.

I wasn't here for the exchange on the anomalies that the investigative report found on the salvage operation for the Mount Saint Helens area but when I read the report, Mr. Crowell and Mr. Peterson, I was concerned with the findings.

The report indicated that there were instances of fairly substantial bidding up of some species like hemlock and lower bidding on Douglas fir which enabled some sales to be taken with relatively low bids on Douglas fir. The report, I think, stated that as a consequence, a lot of the hemlock would be left, would not be taken out.

The cheap Douglas fir would come out and the Government would lose revenues as a result. I think they called it skewed bidding.

I want you to respond to that, but more importantly, and I don't think this was covered this morning, I was doubly concerned over the fact that the Regional Forester, according to this report on July 16, 1981, sent a letter to the Forest Supervisor who has jurisdiction over this, to direct him to go forward on the fixed-rate basis on minor species but that was ignored. The report was published in April 1982, and as of that date the Forest Supervisor had not complied with that directive. That is almost a year where the Forest Supervisor had a directive to change something that clearly was not in the best interest of the Treasury or the taxpayer.

How can you explain that?

Mr. PETERSON. Well, in the first place the document says the Regional Forester directed it. More likely it was somebody on the Regional Forester's staff, and more likely it was read by somebody on the Forest Supervisor's staff. But regardless of the situation I can assure you——

Mr. AUCOIN. Was it signed by the Regional Forester?

Mr. PETERSON. I don't know. I can tell you now that the Forest Supervisor is selling that on a fixed rate.

Mr. AUCOIN. I am glad to hear that because it should have been from the beginning. But my understanding is that the letter was signed by the Regional Forester. I would think that would not be shuffled around and put in the lower tier of a three-tier in-basket.

Mr. PETERSON. I don't know the circumstances. All I can tell you is that it has been corrected.

SKEWED BIDDING

Mr. YATES. Under what circumstances does the Forest Service engage in skewed bidding? What is skewed bidding?

Mr. PETERSON. We don't ever engage in skewed bidding ourselves.

Mr. YATES. What is skewed bidding?

Mr. PETERSON. We estimate the volume by each species. We say there is so much volume for each species. When we determine the successful bidder, we multiply the bid by each species times the estimated volume to see who gets the bid. If somebody determined the hemlock they have got in there will never produce that volume because it will deteriorate between now and then, he will bid higher on that knowing that he will never have to pay that because the volume won't be there. So you may get the wrong successful bidder. This is really what you get. You can't really prove that the Government lost money.

Mr. AUCOIN. Why not?

Mr. PETERSON. Because you can't prove that he would have bid higher on Douglas fir if he didn't have this other opportunity.

Mr. AUCOIN. Chief, you can't prove it, but a thoughtful person can certainly reach that conclusion.

Mr. PETERSON. I know a thoughtful person can reach that conclusion, but you have to remember that there are several bidders in that room, all of whom are pretty sharp and they know precisely what that guy is doing, so they change their bids. So they are really looking at the total amount they pay. So in order to prevent that kind of thing from happening, we have developed a policy to use a fixed rate on those minor species to prevent this kind of an aberration.

Mr. YATES. How often do such aberrations occur?

Mr. AUCOIN. According to the investigative report, Mr. Chairman, I don't know the number of instances, but there is a list of sample sales that they have inserted on page 36 of the report. To give you an example, they have a sale that they have labeled sale number 5. It shows that the appraisal for Douglas fir was at $3. The appraisal for hemlock was at $2.

The bid for Douglas fir was at $272, which is substantially above the appraisal for the Douglas fir.

Mr. YATES. It would seem so.

Mr. AUCOIN. Then the bid for hemlock was at $2, which is exactly what the appraised price was. You can look at that as sort of a control factor or a baseline. Compare that with what the report cites in sale 57. Again, in that case the Douglas fir appraisal was $3, the hemlock appraisal was $2.04. But the bid in for hemlock was $95, on a $2 appraisal. The bid on Douglas-fir was $164, substantially below the $272 bid from the sale 5.

But taken together in the sale that is in question, it is a fairly large dollar amount in the bid. But if the person who bid on that and bid up the hemlock to $95, if he doesn't take out the hemlock, he can walk out then with the Douglas-fir that is the other part of his bid at $164 per million board feet as opposed to the $272 bid in the earlier sale that I mentioned.

Because he pays for what he takes out, he can walk out with cheap Douglas-fir. Now if the Treasury doesn't lose on that, I don't know who does.

Mr. PETERSON. If he could operate the system like that, then the Treasury would lose. He has to pay for that hemlock whether he takes it or not. He doesn't just pay for what he takes.

Mr. AUCOIN. Why is that?

Mr. PETERSON. We would require him to take all of the material that is included in the sale. He doesn't have an option.

Mr. AUCOIN. What if hemlock deteriorates?

Mr. PETERSON. If it gets below merchantability standards by deterioration, which it probably will not, then the volume would be less. That is speculation. He is also betting on what it will look like when it comes to be scaled. He could really get burned on this because the volume could also be higher. We have already put our estimate of how much that is going to deteriorate in the appraisal and in the sale. If it deteriorates less than this or if there is more volume, he can get burned very badly on the skewed bidding.

So you can't bet that only the Government gets stuck. The purchaser could also really get stuck. That is the reason we don't like the whole system.

Mr. YATES. How often does the purchaser get stuck?

Mr. PETERSON. In some cases some of them have been hurt very badly when they bid on what they thought was a minor species.

Mr. YATES. At Mount Saint Helens?

Mr. **Peterson**. We don't have the experience there. But it can work both directions. It isn't automatic that the Government gets hurt.

RATIONALE FOR HEMLOCK OVERBIDDING

Mr. **AuCoin**. Can you think of any reason why hemlock would be bid up from an appraisal of $2.04 to $95 in a sale such as the one I have described if not to enable the same bid to come in lower for Douglas fir?

Mr. **Peterson**. In that same sale, the Douglas fir was bid from $3 to $164. The purchaser could well have a market for hemlock that is a particular kind of a market. I don't know why he bid that, but there is a 50 times increase for Douglas fir.

Mr. **AuCoin**. What are the probabilities, though? I know there could be a market for hemlock. But, isn't there a greater probability that it is not some market for hemlock but a good way to lower the bid on Douglas fir, but still have the total bid high enough to walk off with the sale?

Mr. **Peterson**. We are concerned about that probability.

Mr. **AuCoin**. That is why you issued the directive?

Mr. **Peterson**. It could be a problem.

Mr. **AuCoin**. But we don't know why the Supervisor took a year to implement the directive.

Mr. **Peterson**. But the Supervisor didn't really sell a lot of timber during this period of time.

Mr. **AuCoin**. But the directive didn't say if you sell a lot we want you to do this.

Mr. **Peterson**. I don't know why he did it, but at least we straightened it out at this point.

Mr. **AuCoin**. I would like you to tell the Forest Supervisor that at least some members of this subcommittee are not pleased with his dragging his feet on a directive like this.

Mr. **Peterson**. I will tell him. We have already conveyed our feeling on this.

Mr. **AuCoin**. Tell him hello for me, too.

Mr. **Crowell**. Is it possible that there were no sales made in the interim between when the instruction was received and when it was finally implemented?

Mr. **AuCoin**. What is that, John?

Mr. **Crowell**. I am asking whether the report shows that there were actual sales made after the instruction was received, and between the time it was finally implemented. You see, the date of that indicates to me that some of those salvage sales could have been put up for market in June. The instruction came out in July after the bidding experience showed what they were doing, but there were no salvage sales planned until this spring and at that point it would have been implemented.

I am not sure if that was the case. I am just guessing, but I am asking whether the report shows that.

Mr. **AuCoin**. It says, "This directive was not followed and as a result the Federal Government received substantially less for Mount Saint Helens timber." But I haven't read further than that.

Mr. **Crowell**. There may not have been occasion to follow it. I am not saying that was the instance. I am just suggesting that there could be an explanation for it.

Mr. **AuCoin**. I will read further and find out. I appreciate your point.

ROLE OF THE FOREST SERVICE

Mr. **Yates**. Before we go to lunch, let me read from the U.S. Department of Agriculture Publication FS-346, dated September 1980, on page 9 where it talks about Forest Service roles it says this:

> Measured in numbers of employees, size of budget, amount and diversity of professional expertise, the Forest Service is by far the largest forest conservation organization in the United States. The Agency's size, however, is no greater than its responsibilities. It is expected to provide national leadership in forest conservation policies and programs. The Resources Planning Act, section 2(6) states "The Forest Service has both the responsibility and an opportunity to be a leader in assuring that the Nation maintains a national resource conservation posture that will meet the requirements of our people in perpetuity."

RECOMMENDED SALES PROGRAMS

Then I turn to page 12 of the same instrument and I notice that in 1981 the recommended program sales were 11.9 billion board feet. In 1982 the same figure was recommended, and in 1983 the figure is 12.1 rather than the 12.3 you are requesting now.

Mr. **Peterson**. Part of that difference, in fact, most of the difference will come from Mount Saint Helens, which we did not anticipate.

Mr. **Yates**. Well, it is kind of interesting to look at what is proposed for subsequent years. For 1984, 12.2 was recommended. For 1985, 12.5 was recommended. They must have known about the housing boom coming along. In 1986 to 1990 there is recommended 12.9.

Mr. **AuCoin**. Are these recommendations for timber sales levels?

Mr. **Yates**. Projected National Forest System program output, the recommended program.

Then from 1991 to 2000 the recommended level is 13.7. From the year 2000 to 2010 the recommended level is 14.1 billion board feet. For the two subsequent decades the levels are 15.8 billion board feet, and 16.4 billion board feet.

Mr. **AuCoin**. Could I ask one question?

Mr. **Yates**. Sure.

EFFECT OF ROAD INCREASE IN 1983 TO OUTYEAR SALES

Mr. **AuCoin**. Yesterday we were talking about the increase under the roads account for this year of $38 million. You indicated that no portion of that really is needed for this year's 12.3 billion board foot timber sales level. If we don't approve that in the outyears, you are not going to be able to maintain a timber sales level.

My question is, Is the $38 million necessary to achieve a continuing 12.3 board foot level? Would any decrease in the $38 million expenditure for roads affect your plans for a 12.3 billion board foot level or a somewhat higher level of timber sales? Is that what the impact would be?

Mr. **Peterson**. Yes.

Mr. AuCoin. You are assuming with the $38 million request, at least a continuation of the 12.3 billion board foot timber sales level in the out-years, and it is that assumption that would be negatively affected if we don't approve the $38 million for the roads function?

Mr. Peterson. That is correct.

Mr. Yates. Let's come back at 1:30.

Afternoon Session

PERSONNEL

Mr. Yates. Let's go to your budget now and on page 305 of your justification, it is indicated that you had 7,868 unfilled positions at the end of the year.

How many do you have unfilled now?

Mr. Peterson. We really estimate about 1,500 at the present time are unfilled.

END-OF-YEAR UNFILLED POSITIONS

Mr. Yates. How come you had 7,800 unfilled at the end of 1981, if that figure is accurate?

Mr. Peterson. You remember, Mr. Chairman, several years ago, the committee was critical of the fact that we had a lot of people that worked for 25 pay periods of the year, or maybe 32 hours of 26 pay periods, that were essentially full-time people.

Mr. Yates. Yes.

Mr. Peterson. Under the new full-time equivalent system, based on full-time equivalents, we converted about 7,000 to 8,000, people that are essentially from full-time.

So that showed up technically as positions that will be filled shortly.

Mr. Yates. They will be filled shortly or were filled?

Mr. Peterson. They are being filled and they are probably almost all filled now.

Mr. Yates. Have they filled over 7,000 of them now?

Mr. Peterson. We just converted people from almost full-time to full-time. We gave them eight hours or more of work.

Mr. Yates. These are the same people?

Mr. Peterson. The same people, yes. They are not additional people.

POSSIBLE REDUCTIONS IN PAYROLL

Mr. Yates. Now that you have put them on the payroll, are there cuts that are going to take them off the payroll? How many of these are going to go?

Mr. Peterson. Well, very few. When we made these conversions, one of the criteria for making the conversions was that there was future work for them. So we would expect very few of them——

Mr. Yates. Well, the fact that there is work for them hasn't been a standard in other agencies for keeping people on the payroll.

Mr. Peterson. We will be making, as we already pointed out, some changes in research. There are some changes in numbers of people. The total budget will produce about 1,700 less full-time equivalents in 1983 than there were in 1982.

Mr. Yates. Well, you had a figure of 1,389 for permanent employees. Excuse me, full-time equivalents.

Mr. Peterson. That is a reduction of 1,751 in full-time equivalents.

REPLACEMNT OF PERSONNEL BY CONTRACTING

Mr. Yates. Well, are you replacing personnel taken off your payroll by contract activity?

Mr. Peterson. No, not directly. As I mentioned yesterday, we have a large amount of contracting already going on and we will continue a large amount of contracting. I guess our statistics are that we are about $6 to $8 million additional contracting next year compared to 1982. Some of that is just increased cost due to inflation

Mr. Yates. Is the amount of money made available to you adequate to take care of the needs of the Forest Service?

Mr. Peterson. Mr. Chairman, I think, as I said yesterday, considering the fact that the entire Government is cutting back in an effort to reduce the deficit, I think ours is a reasonable budget.

MULTIPLE-USE MANAGEMENT OF LANDS

Mr. Yates. You are required to manage the lands in a true multiple-use manner, are you not?

Mr. Peterson. We certainly intend to do this.

Mr. Yates. I know you plan to; will you be able to?

Mr. Peterson. Yes, sir; we will be able to do it. We will be deferring some investments.

IMPACT OF SHORT-TERM REVENUE RAISING ACTIVITIES

Mr. Yates. You are going to emphasize short-term revenue raising activities according to the Assistant Secretary's statement yesterday. Is there going to be a longer term impact on the Forest Service?

Mr. Peterson. Obviously, if some investments are deferred there will be less future output. But in some cases, those outputs will not be cost effective at today's high cost of money.

AVAILABILITY OF FUNDS FOR RECREATION ON NONTIMBER FORESTS

Mr. Yates. How does the fact that some forest may have timber sales and some forests may not affect the question as to whether or not funds would be made available for recreation programs in the nontimber forests?

Mr. Peterson. The recreation program for 1983 has actually increased over 1982. So, there will be money available for the nontimber.

Mr. Yates. Do I understand correctly that the nontimber forests will receive the same kind of consideration in providing recreation opportunities for the public as timber forests?

Mr. Peterson. Yes, providing there is use there.

BASIS FOR 1983 TIMBER RECEIPTS ESTIMATE

Mr. Yates. You think you are going to get $2.2 billion in receipts for 1983, which is up 37 percent over 1982. What is the basis for that estimate?

Mr. Peterson. That is based on timber harvests of 10.6 billion feet. We provided, I believe, on page 12 of the Explanatory Notes, a breakdown of where that comes from. But we are dealing with the timber harvest number which is the largest number expected to give out $1.548 billion. That is based on a harvest level of 10.6 billion board feet and a value per thousand board feet of $158.

Mr. YATES. Your estimates in previous years have been optimistic. Is this an optimistic projection?

Mr. PETERSON. Truthfully, I can't tell you because it depends primarily on what happens to the housing market. If it swings back up beginning this fall as some predict, it could be low. If the housing market does not swing up, it could be high.

I don't think my crystal ball is much better than anybody else's. Maybe it is not as good as some.

TIMBER PURCHASER CREDIT DECREASE

Mr. YATES. Can you tell us why the timber purchaser credit decreases from $107 million to $105 million?

Mr. PETERSON. That 105 million is just the outlay from previous years. In 1982 and 1983 it was an off-budget item. So it will disappear as an outlay.

Mr. YATES. How did you arrive at the 12.3 BBF program? Why not 12.4 or 11.7? How did you arrive at 12.3?

Mr. PETERSON. This first was based on our field request indicating the preparation they had done in previous years that would be available at that time. It is based on individual National Forest plans in terms of their planned timber harvest and, finally, it was based on evaluation at our level and the Secretary's level of some increase in timber harvests to provide timber for future housing starts.

Mr. YATES. Suppose, instead of the 12.3 BBF figure you recommended, the committee were to approve a figure of 11.5 or 11.6. How much money would be saved in the various accounts?

Mr. PETERSON. We have prepared, at the request of the committee, a breakdown of that.

Mr. YATES. May I see it?

[Document proffered to the chairman.]

Mr. YATES. You are now at a total of $664.9 million as being what it would take to project a 12.3 BBF, right?

Mr. PETERSON. That is correct.

Mr. YATES. And if it were 11.9, that would be reduced by approximately $20 million?

Mr. PETERSON. That is correct.

Mr. YATES. These calculations may go into the record at this point. They show fiscal year 1983 timber sale preparation cost ranging from a projected BBF of 11.0 to 12.3.

Mr. PETERSON. It probably also should show a projection of increase in receipts which would be the other side of the cost saving.

Mr. YATES. Can you supply that for the record?

Mr. PETERSON. Yes. sir.

[The information follows:]

COST COMPARISONS FOR TIMBER SALE PROGRAMS

The following tables show the timber sale preparation and administation costs, timber support costs, road construction costs and special accounts costs for each 100 million board foot increment. Each 100 million board foot increment from 11.0 to 12.3 billion board feet will generate receipts of approximately $25 million.

FY 1983 TIMBER SALE PREPARATION COST TABLE
Volume (Billion Board Feet)

Budget Item	11.0	11.1	11.2	11.3	11.4	11.5	11.6	11.7	11.8	11.9
	(Million Dollars)									
NATIONAL FOREST SYSTEM:										
Sales Preparation	121.2	122.3	123.4	124.5	125.6	126.7	127.8	128.9	130.0	131.1
Harvest Administration	51.1	51.1	51.1	51.1	51.1	51.1	51.1	51.1	51.1	51.1
Harvest Volume (MMBF)	(10.6)									
Subtotal	172.3	173.4	174.5	175.6	176.7	177.8	178.9	180.0	101.1	182.2
Minerals	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.3
Land Line	17.7	17.9	18.0	18.2	18.4	18.5	18.7	18.8	19.0	19.2
Fire Protection	2.6	2.6	2.6	2.7	2.7	2.7	2.7	2.8	2.8	2.8
Road Maintenance	30.8	31.0	31.3	31.6	31.9	32.1	32.4	32.7	33.0	33.2
Recreation (Cult. Surveys)	8.1	8.2	8.3	8.4	8.4	8.5	8.6	8.7	8.7	8.8
Wildlife and Fish	4.1	4.2	4.2	4.2	4.3	4.3	4.3	4.4	4.4	4.4
Range	.4	.4	.5	.5	.5	.5	.5	.5	.5	.5
Soil and Water	5.6	5.7	5.7	5.8	5.8	5.9	5.9	6.0	6.0	6.1
Subtotal	70.5	71.2	71.8	72.6	73.2	73.7	74.3	75.1	75.6	76.3
CONSTRUCTION:										
Forest Road Construction	226.0	228.0	230.1	232.2	234.2	236.3	238.3	240.4	242.4	244.5
Purchaser Construction	(240.0)	(242.2)	(244.4)	(246.6)	(248.8)	(250.9)	(253.1)	(255.3)	(257.5)	(259.7)
Purchaser Election	40.4	40.5	40.9	41.2	41.6	41.9	42.3	42.7	43.1	43.4
Subtotal	266.4	268.5	271.0	273.4	275.8	278.2	280.6	283.1	285.5	287.9
SPECIAL:										
Brush Disposal	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1	49.1
Timber Salvage	7.0	7.1	7.1	7.2	7.3	7.3	7.4	7.4	7.5	7.6
Tongass Timber Supply Fund	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2	40.2
Subtotal	96.3	96.4	96.4	96.5	96.6	96.6	96.7	96.7	96.8	96.9
TOTAL	605.5	609.5	613.7	618.1	622.3	626.3	630.5	634.9	639.0	643.3

FY 1983 TIMBER SALE PREPARATION COST TABLE (Con't)

Volume (Billion Board Feet)

Budget Item	11.9	12.0	12.1	12.2	12.3
	(Million Dollars)				
National Forest System:					
Sales Preparation	131.1	132.2	133.3	134.4	135.5
Harvest Administration	51.1	51.6	52.0	52.4	52.8
Subtotal	182.2	183.8	185.3	186.8	188.3
Minerals	1.3	1.3	1.3	1.3	1.3
Land Line	19.2	19.4	19.6	19.7	19.8
Fire Protection	2.8	2.8	2.8	2.9	2.9
Road Maintenance	33.2	33.5	33.8	34.1	34.4
Recreation	8.8	8.9	8.9	9.0	9.1
Wildlife and Fish	4.4	4.4	4.5	4.5	4.6
Range	.5	.5	.5	.5	.5
Soil and Water	6.1	6.2	6.2	6.2	6.3
Subtotal	76.3	77.0	77.6	78.2	78.9
Construction:					
Forest Road Construction	244.5	246.6	248.6	250.6	252.7
Purchaser Construction	(259.7)	(261.9)	(264.1)	(266.2)	(268.4)
Purchaser Election	43.4	43.8	44.1	44.5	44.9
Subtotal	287.9	290.4	292.7	295.1	297.6
Special:					
Brush Disposal	49.1	49.5	49.9	50.3	50.7
Timber Salvage	7.6	7.7	7.7	7.8	7.9
Tongass Timber Supply Fund	40.2	40.5	40.8	41.1	41.5
Subtotal	96.9	97.7	98.4	99.2	100.1
TOTAL	643.3	648.9	654.0	659.3	664.9

Mr. **Peterson**. It would not be increased receipts in 1983. It would be in the out years.

AVERAGE BID PRICE IN REGION SIX

Mr. **Yates**. Is there a current average bid price for Region 6?

Mr. **Peterson**. Sure. There is a running average. I would say that on short-term sales, the one we have been making in order to try to provide some material that would immediately go into the market to provide jobs, about 60 percent of those contracts have been running $100 to $200 a thousand.

Mr. **Housley**. About $110 per thousand recently.

Mr. **Peterson**. The average is about $110 per thousand.

Mr. **Yates**. Would you place in the record a summary of the last 6 months compared with the same period in 1980 and 1981 by region?

Mr. **Peterson**. Yes, sir.

Mr. **Yates**. You can do that?

Mr. **Peterson**. It would be helpful if we could do it at the end of a quarter because that is what we keep our statistics by.

Mr. **Yates**. Okay.

[The information follows:]

Average Bid Prices for Timber

The information for the last 6 months of calendar year 1981 has not yet been reported. The average bid price by Regions for calendar year 1979, 1980, and the first half of 1981 is as follows:

AVERAGE BID PRICE PER MILLION BOARD FEET BY CALENDAR YEAR

[Dollars per million board feet]

Region	1979—quarters				1980—quarters				1981—quarters	
	1	2	3	4	1	2	3	4	1	2
Northern (1)	77.34	86.32	70.56	60.04	50.45	61.81	1.88	56.93	61.90	96.65
Rocky Mountain (2)	7.88	6.86	12.00	17.39	3.54	5.49	7.29	12.10	29.27	2.32
Southwestern (3)	128.46	118.77	84.43	55.68	16.98	86.16	45.38	26.10	118.94	78.17
Intermountain (4)	29.29	50.97	48.93	92.73	61.37	42.91	19.48	46.58	300.46	15.23
Pacific Southwest (5)	65.70	71.12	63.74	53.06	270.45	227.89	311.90	213.40	210.80	118.62
Pacific Northwest (6)	248.38	245.63	269.26	265.08	309.72	247.07	231.00	266.23	314.11	213.86
Southern (8)	147.63	165.18	146.74	246.96	153.15	118.06	139.90	172.73	157.42	163.99
Eastern (9)	29.19	30.52	26.67	31.53	26.92	42.63	27.92	31.36	34.30	29.19
Alaska (10)	58.77	34.27	178.39	149.37	2.16	48.98	111.42	....	36.68	82.29

TIMBER SALE CONTRACTS

Mr. **Yates**. Is there any assurance that the companies that have high price sales under contract will be the winning bidders on sales at low prices to average the cost of their inventory? There is no chance of that, is there?

Mr. **Peterson**. We are never sure who is going to bid.

Mr. **Yates**. A Forest Service paper dated March 23 says there are some timber sale bids so high, particularly in northern California, western Oregon and to some extent western Washington, that they could not profitably be harvested even under the best markets ever experienced.

Mr. PETERSON. That is true.

Mr. YATES. Why did they bid so high then?

Mr. PETERSON. At the time they bid those prices, I am quite sure they assumed that inflation would continue at the rate that has occurred in recent years.

Therefore, they were bidding on a futures market. It appears now that it won't happen.

Mr. YATES. They are the ones we talked about earlier today, aren't they?

Mr. PETERSON. Yes.

Mr. YATES. They are hoping for some kind of a governmental sympathy. Perhaps something more than governmental sympathy.

Mr. CROWELL. Action, yes.

Mr. YATES. What percent of the total timber contracts are included in this situation?

Mr. PETERSON. It is 10 billion out of 34 billion, so it is approaching a third.

Mr. YATES. That is big, isn't it?

Mr. PETERSON. It actually represents more than half of the timber under contract in the western parts of Oregon, Washington and northern California.

Mr. YATES. In view of that situation should you be going for 12.3 BBF?

Mr. PETERSON. As we indicated earlier, that timber under contract and economically unavailable would take additional lower priced timber to mix with it, under the best conditions, to get it moved.

Mr. YATES. Yes, but some of those purchases are going to take a beating, aren't they?

Mr. PETERSON. Yes, sir.

Mr. YATES. If they face the prospect of taking a financial beating, are they likely to be bidders on the next sales?

Mr. CROWELL. They are going to take a beating in any event, Mr. Chairman. Either they are going to default or they are going to be able to operate these sales in conjunction with lower priced sales that they have to buy.

Mr. YATES. Do they have the financial resources in order to do that?

CONTRACT EXTENSION POLICY

Mr. CROWELL. Some of them may and some of them may not. That is another source of concern to us, as I indicated yesterday when I talked about the extension policy and the attempts that we are now undertaking with the Comptroller General to modify the cash deposit requirements in connection with extension deposits.

Mr. YATES. Why would you want to do that? Should the Government be protected? That is a reasonable requirement, isn't it?

Mr. CROWELL. Yes, that is a reasonable requirement and that is why we put it on. But, on the other hand, if all the blood is gone out of the turnip we aren't going to be able to collect it, if they do go into default. So I think it makes some sense for us to consider keeping these people financially viable and able to either work off their accumulated timber buys with lower priced sales or giving them some sort of contract relief.

Mr. PETERSON. I think, Mr. Chairman, you might liken it to a case where all your alternatives are not very good. The alternatives of just hanging tough means that the Government will likely end up with a bunch of mills. There will be other creditors coming in and claiming equipment and so on.

So we are going to find all kinds of people displaced and a great economic problem both for the people directly affected, the workers and the owners, but also the consumer will have a lessened timber supply because the mill won't be there to respond.

So none of the alternatives we are faced with are ones that we would like to have. We are trying to figure out some equitable way to protect both the public's interest and also keep some employment going. We haven't found any perfect solution yet.

Mr. YATES. Well, you don't consider your projection optimistic then, otherwise, you wouldn't be asking for the 12.3 BBF, would you?

Mr. PETERSON. We consider this amount responsive to the lumber and plywood requirements in the years of 1984, 1985 and 1986.

Mr. YATES. But you have, in previous years, considered the requirements for 1981, 1982 and 1983 and you have been optimistic on those, haven't you?

Mr. PETERSON. We have been over-optimistic in the last 10 years because I don't think anybody expected the economy to——

Mr. YATES. What about the last 2 or 3 years?

Mr. PETERSON. We were reasonably close, in fact, our estimates——

Mr. YATES. Why don't you put it in the record for the last 10 years?

[The information follows:]

TIMBER HARVEST—ESTIMATE VS. ACTUAL

[Billion board feet]

Fiscal year	Planned	Actual
1972	11.5	11.7
1973	11.0	12.3
1974	10.5	10.9
1975	10.0	9.2
1976	10.0	9.6
1977	10.0	10.5
1978	10.5	10.1
1979	11.5	10.4
1980	11.5	9.1
1981	10.5	8.0
1982	[1] 8.5	([2])
1983	10.6	([2])

[1] Revised estimate; original estimate was 11.7.

[2] Unknown.

Mr. PETERSON. I think, Mr. Chairman, we have the numbers and it shows that we are within a billion for the last ten years.

Mr. YATES. Is a billion considered reasonable?

Mr. PETERSON. It is within 10 percent.

Mr. YATES. One percent is more reasonable.

Mr. PETERSON. We would have to be some sort of prophets to get that close.

Mr. YATES. Well, you are going to have to be prophets with this cut budget, aren't you?

Mr. PETERSON. We are going to have to work hard, yes.

Mr. YATES. Yes, you are going to have to work hard.

CONTRACT EXTENSIONS AND NON-FOREST SERVICE TIMBER

Are you considering the situation of companies who continue to cut non-Forest Service timber, which might be available to them at lower prices, while extending their Forest Service timber contract?

Mr. CROWELL. I don't understand the question, Mr. Chairman.

Mr. YATES. Well, companies who are cutting non-Forest Service timber which might be available to them at lower prices, while at the same time, they request to have their Forest Service timber contracts extended.

Under those circumstances, do you still extend their contract?

Mr. CROWELL. We don't make any distinction based on what other sources of timber supply may be available to a particular purchaser who otherwise would meet our requirements for an extension.

Mr. PETERSON. The problem, Mr. Chairman, is that we have some people who get 10 percent of their supply from someone else, some 5, some 40, and some 50, and we haven't figured out any reasonable way to make a distinction.

FOREST SERVICE SALES LEVEL VS. PRIVATE INDUSTRY

Mr. YATES. You have a 12.3 BBF projection. Are private companies making the same kind of optimistic projection for their future cuts? Do you have any way of knowing this?

Mr. CROWELL. We don't have any way of knowing that, but part of the reason for the 12.3 billion board foot——

Mr. YATES. Do the companies not tell you what their plans are?

Mr. CROWELL. No.

Mr. YATES. They just want to come in now and participate in your bidding.

Mr. CROWELL. It would primarily be based on the conditions of the economy. One of the reasons for the 12.3 billion board foot sale program in 1983 is the expectation of demands in 1984, 1985 and 1986. As I said yesterday, we have an increasing dependence by timber users in this country on National Forest timber because of the historic trends of harvesting on various classes of ownership in this country.

ROAD CONSTRUCTION IN NONWILDERNESS AREAS

Mr. YATES. Is any portion of your road construction budget for construction in nonwilderness, roadless areas?

Mr. PETERSON. Yes, sir.

Mr. YATES. What portion of it?

Mr. PETERSON. We anticipate we would build about 1,100 miles of road in nonwilderness areas next year.

Mr. YATES. What is the projected cost of that?

Mr. PETERSON. I don't believe we have an estimate on that but let me point out that all of these areas were not recommended by either the previous Administration or this Administration for wilderness.

These are not wilderness areas. These are roadless nonwilderness areas. We would guess about $77 million.

Mr. YATES. Are any of these roadless areas likely to be considered for wilderness?

Mr. CROWELL. Not in the near future.

Mr. YATES. But if you cut them, they won't be wilderness.

Mr. CROWELL. But even if they were left alone they wouldn't be considered again for wilderness until the next planning process or until the Congress gives us some direction about whether they should be excluded either permanently or for a certain period of time.

Mr. PETERSON. The environmental statement that was issued at the time the recommendations were made in our regulations say that those same areas won't be considered again for wilderness until the next generation of National Forest management plans which will be in 10 or 15 years.

So they are not likely to receive, by us, additional consideration because we have already gone through that process.

PROJECTED TIMBER HARVEST AND OFFER

Mr. YATES. Let's go out to 1984 or 1985 when you look for the booming housing market. Assuming that comes into being, what would be your projected cuts for the following year?

Mr. PETERSON. Well, the cut would probably increase from where it is now to the neighborhood of 12 to 13 billion.

Mr. YATES. For how many years following; what years are you talking about?

Mr. PETERSON. Let's assume that in 1983 it is at 10.6 but the housing market has a smooth upswing to 11 or 11.5 and maybe 12 the following year. It would probably remain at over 13 billion depending on the level of sales.

Mr. YATES. That is the harvest level. What is the sales level?

Mr. PETERSON. You have the RPA production.

Mr. YATES. Yes, I have that. But here you are projecting a 12.3 for 1984 or 1985.

Mr. PETERSON. No, I was not projecting the sale level.

Mr. CROWELL. 12.3 is the sales level for 1983. Responding to your question a few minutes ago on 1984 and 1985, we were projecting harvest levels. Now you are asking what our projected sales level might be for 1984 and 1985?

Mr. PETERSON. We don't have that figure worked out. That will be developed as part of the budgets for 1984 and 1985. I would expect it would be at least 12.3 and probably higher than that depending on what the economy looks like.

Mr. YATES. Well, when will you ever cut back on your proposed sales calculations?

Mr. CROWELL. Well, there is no reason to cut back in this stage of time, Mr. Chairman, because, as I have indicated earlier, the increased dependency by the wood users of this country on National Forest timber. Remember the figures I gave yesterday, 50 percent of the standing softwood inventory in the United States today is on National Forest land. So if we are going to keep prices for wood from going up rather drastically, we need to increase the supply of wood coming off the national forests.

Mr. YATES. Won't there be a glut of lumber as there is now a glut of oil in view of all the contracts you have got now?

Mr. CROWELL. No, we don't think there will be. If the housing demand is what we now project it to be, and if the sales program is what we are proposing, there won't be any glut. We will be under pressure to sell more timber.

Now, if our projections about housing demand are wrong and we stayed on a path of increased timber sales, a glut would be conceivable. But that would involve very different assumptions about the state of the economy and we believe we are justified in that.

Mr. YATES. Are lumber prices down?

Mr. PETERSON. Oh, drastically.

Mr. YATES. Now is the time to build a house?

Mr. CROWELL. It wouldn't be a bad time if you could get financing.

Mr. YATES. Or get some cheap land. The lumber is available at reasonable prices.

Mr. CROWELL. It is readily available.

WOOD WASTE UTILIZATION

Mr. YATES. How much is included in your budget request for waste wood utilization?

Mr. PETERSON. Are you talking about the Wood Utilization Act?

Mr. YATES. The waste wood utilization project.

Mr. PETERSON. For the Wood Utilization Act, the budget has in it $1.368 million.

Mr. YATES. What are you going to use that for?

Mr. PETERSON. That will be used mostly in Oregon, Washington and Montana for such things as residue concentration in a place where it will then be economically accessible.

In the State of Washington, we are working with an electric utility to try to remove some of this to a power plant in Montana. I believe the number $1.368 million is for projects on National Forest lands. There is another $310,000 for cooperative projects on private and other public land.

GYPSY MOTHS

Mr. YATES. Yesterday and today, Mr. McDade raised some questions about the gypsy moth, an apparently very active pest at the present time. Are there others who you would rank as being in the same category at this time?

Mr. PETERSON. Yes, there are actually some other pests that are more destructive.

Mr. YATES. What does a gypsy moth do?

Mr. PETERSON. It defoliates hardwood trees, eats all the leaves.

Mr. YATES. So you have got trees without leaves and I assume this kills the tree?

Mr. Peterson. No. They eat the leaves early in the spring, usually in May. If the tree is strong it will put out new leaves because the moths are only there for a 2-week period.

Usually a vigorous young tree will do that for 2 or 3 years. But an old or weakened tree may die after 1, 2, or 3 years of this. So it is not a direct killer of trees. It has an impact on trees which may eventually kill them.

PINE BEETLES

Mr. Yates. What about the other pests?

Mr. Peterson. The mountain pine beetle is very destructive. The southern pine beetle is at a relatively low level right now.

Mr. Yates. There is one that Congressman McGrath is concerned about called the pine bark beetle on the fruit trees. Don't you deal with fruit flies?

Mr. Peterson. We don't deal with fruit flies.

Mr. Yates. Who deals with fruit flies?

Mr. Peterson. Other Agencies in the Department.

Mr. Yates. Don't you do that in your research?

Mr. Peterson. No, we cooperate with ARS. There is a lot of information-sharing going on between scientists but we don't have direct control of fruit orchard pests.

The mountain pine beetle is also a major problem in Canada. In fact, we just signed an agreement with Canada to cooperate on a national program.

Mr. Yates. You get along fine with Canada?

Mr. Peterson. Yes, sir.

CANADA AND ACID RAIN

Mr. Yates. How did you get along with Canada on acid rain?

Mr. Peterson. Quite well. In fact, we are going to co-sponsor a symposium next year with Canada on acid rain and try to look at the technical questions.

Mr. Yates. Well, I am glad they are satisfied with an exchange of words.

The impression I had was they wanted much more vigorous action from you.

Mr. Peterson. This is a scientific effort that we are engaged in with the scientific people in Canada. In addition, we have the spruce budworm in New England, which is also a pest, here and in Canada.

Also, there is a tussock moth which is a periodic problem in the Northwest. There are many insects that are a problem in seed orchards eating the seeds.

We have an expert on the subject, Dr. Ohman, if you want to question him.

FOREST PEST MANAGEMENT

Mr. Yates. Sure, I want to find out whether you are treating all these pests the same way you are treating the gypsy moth which I gather is inadequately.

Mr. PETERSON. All the pests are treated equally in 1982, Mr. Chairman.

Mr. YATES. Dr. Ohman, tell us about what you are doing.

Mr. OHMAN. I might add to the list that the Chief gave you on some of the problem insects. The western spruce budworm, too, is getting very bad and also dwarf mistletoe, which is a continuing problem particularly in the West.

Mr. YATES. What does pretty good progress mean? Are you eliminating any of your pests?

Mr. OHMAN. No, sir; I don't think we will ever eliminate any of our pests.

Mr. YATES. Is that because you don't want them to become endangered species?

Mr. OHMAN. No, sir; I think if we could, we would just as soon eliminate some of these species. We have to learn to live with them and manage them as best we can.

Mr. YATES. Well, is there enough money in your budget to deal with them?

Mr. CROWELL. Not to eliminate, sir.

Mr. YATES. I know you are not going to be able to eliminate them because year after year we hear of the same pests and new pests as threatening our national forests.

Is there enough money in your budget to deal with them?

Mr. OHMAN. No, sir. We are in a very constrained budget situation and we have had to set our priorities, but we are convinced that we will be able to take care of our highest priority needs.

Mr. YATES. You are convinced as to what?

Mr. OHMAN. That we will be able to take care of our highest priority needs.

Mr. YATES. What are your highest priority needs? Do you mean in pest management or in other management? Are your highest priority needs in pest management or in other management?

FOREST SERVICE PRIORITY NEEDS

I ought to ask the Chief that question. What are your highest priority needs? You had to determine those in dealing with this budget, didn't you?

The answer to my question is "yes," isn't it?

Mr. PETERSON. Everywhere we have money in the budget is a priority need, otherwise, it wouldn't have money in it. I am not being facetious. First, you have got to protect the forests.

Mr. YATES. Well, you know there was a movie that rated Bo Derrick on the scale of 1 to 10. Now, presumably you have needs which are on that scale.

When you talk about highest priority needs, that is a relative term for the amount of money you have available. All of it is highest priority because you are eliminating things that are not highest priority. But on the budget itself do you have such things as high priority among your highest priority needs? What do you consider your most important activity to be?

Mr. CROWELL. Well, there isn't any single most important activity, but if, for instance, we were to have the budget cut in half, we would have to eliminate programs, probably not proportionately to the way they are in the presently proposed budget.

It would mean reevaluating the various priorities that had called for a reduction that was that severe in the budget. But we might end up eliminating entire programs. We might end up retaining some programs pretty near the levels they are now.

Mr. YATES. What you are suggesting to the committee is that it ought not reduce the budget that you have presented to it because it is a pretty stringent budget.

Mr. CROWELL. We think it is a stringent budget. We think it is a well designed budget.

Mr. YATES. Suppose the committee, in its wisdom, decided that it ought to add money to your budget, where would you add it?

Mr. CROWELL. I don't know at this point.

Mr. YATES. Does the Chief know at this point?

Mr. CROWELL. Probably not.

Mr. YATES. Speak for yourself, John.

Dr. Ohman, could you use more money in your budget?

Mr. CROWELL. Sure he could.

Mr. YATES. I am asking Dr. Ohman a question.

Mr. OHMAN. Yes, sir; I could.

Mr. YATES. Where could you use more money? Let me put it another way. Should more money be used in dealing with any of the pests that you have named in trying to keep them under control in the fiscal year under consideration?

Mr. OHMAN. Yes, it could. And I guess I would want to make a similar response to what Dr. Buckman gave you.

Mr. YATES. I am sure you would, but I am trying to get an answer that will enable our committee to function. We have a responsibility in this, too. OMB has given you a certain responsibility and you have come forward with it.

The committee, in its wisdom, may find that OMB has not properly provided the funds with which to protect the Nation's resources, the resources that are providing the Nation not only with recreation, beauty and protection for the watershed, but which are an actual source of funds for the Treasury.

Those are being threatened by these pests, aren't they? And the question this committee has to decide is whether in husbanding those resources we have to take your figure, which I am sure you will concede is obviously inadequate, or whether we ought to put more money there to protect these resources.

Now, having laid that foundation, are our forests being threatened by those pests to the point where we ought to worry about it and put more money in to protect those forests?

Mr. CROWELL. Mr. Chairman, we don't have any epidemic pest outbreaks right now that would threaten drastic losses to the forest resource.

Mr. YATES. You don't have any epidemic threats. Are those the only threats that we have to concern ourselves with?

Mr. CROWELL. No, because we also want to monitor areas for potential outbreaks and try to anticipate when outbreaks would occur and treat them so that they won't occur. That is part of the priority-assigning process that we go through in deciding how we are going to allocate moneys for pest suppression, both in the National

Forest System and in the State and private system which we also help support.

Mr. YATES. Do you want to accept that answer, Doctor?

Mr. OHMAN. Yes, sir; I do.

Mr. YATES. Is there a threat to our forests? Do those pests constitute a threat to our forest?

Mr. OHMAN. Yes, they do.

Mr. YATES. How much of a threat? Is it in greater degree in some and lesser degree in other forests?

Mr. OHMAN. Yes, and certain pest combinations are greater threats.

Mr. YATES. Should they be dealt with in a way that you are not going to be able to deal with them because of inadequate funds?

Mr. OHMAN. No. As I say, I am convinced that in this budget, we have covered our most immediate needs.

Mr. YATES. Are the pests going to be held in control by the budget you have or should there be more money put in there to control the pests to a greater extent?

Mr. CROWELL. We can't be sure because we really don't know enough about pest outbreaks.

Mr. YATES. Well, then, tell us that. I think Dr. Ohman is obviously uncomfortable with my question and I think he is uncomfortable with your answer because he has got a certain responsibility, too, and what you are doing is placing a heavy hand upon him, and not letting him answer.

Mr. CROWELL. I don't intend to place a heavy hand on him but I am trying to answer the questions that the Chairman is posing.

Mr. YATES. I am posing them to Dr. Ohman because I think he may be a little more familiar with his field than you are.

Mr. CROWELL. He is more familiar with his field than I am, there is no question about it. I rely on him.

Mr. YATES. Of course you do.

I am trying to find out whether or not the committee ought to put more money in to protect the Nation's resources from the threat posed by these pests and whether it is good husbandry to do that.

If you were a private company would you be doing something like that? Would you be putting more money in to protect your inventory?

Mr. OHMAN. I think that a private company would do the same thing that we did in looking at what our priorities are.

Mr. YATES. Would the private company borrow money in order to protect its resources because of a potential threat if any were present?

Mr. OHMAN. If they were unable to cover a very high priority need.

Mr. YATES. Your budget is not in that position, is what you are saying?

Mr. OHMAN. No, sir.

Mr. YATES. We don't have to worry about the pests?

Mr. CROWELL. Don't say it that strongly. You do have to worry about pests but you don't have to worry about the——

Mr. YATES. Well, what are you going to do? I am having a terrible time trying to get an answer out of you.

Mr. Ohman. We are going to have to accept some losses in this kind of a budget.

Mr. Yates. What does that mean, "We are going to have to accept some losses in this kind of a budget?" What kind of losses are you going to have to accept?

Mr. Ohman. Well, some of these relatively lower priority things that we will not be able to go after.

Mr. Yates. Like what? Give me an example.

SUPPRESSION ACTIVITIES

Mr. Ohman. Well, I think with almost in any of these pests that we have mentioned there are areas that we will not take suppression in.

Mr. Yates. And what will happen as a result of your not taking suppression?

Mr. Ohman. Well, as the Chief mentioned, some of these pests we can defer suppression on.

Mr. Yates. What effect will that have on the forest?

Mr. Ohman. We will have some reductions in forests and we may have some additional mortality.

Mr. Yates. What is your mortality now?

Mr. Ohman. I can't answer that specifically.

Mr. Yates. Would this chart help you to answer it specifically? That is a survey.

Mr. Crowell. We have some figures on mortality. Whether it is in terms of mortality attributable to pests, I am not sure.

Mr. Ohman. We can provide that for the record.

Mr. Peterson. I think maybe one thing that we need to be sure we don't avoid telling you——

Mr. Yates. Well, whatever it is you are avoiding it.

Mr. Peterson. The budget in 1983 assumes that we will continue an active research effort and we will continue technical assistance programs of the past, but on private land the suppression job will be shifted to the States or the private landowner.

Mr. Yates. That is nothing. You are not going to get anywhere with that and you know it. Isn't that true? You are not going to have them put up the money that is necessary to handle things like that. I think that is strictly language, rhetoric.

Mr. Crowell. A lot of insect control work is done with timber harvesting and many private operators——

Mr. Yates. Well, I would imagine it would be. It is a race to get the trees cut before the pests can get at them.

Mr. Crowell. Or it is a race to cut them after they have died but before they deteriorate. In any kind of insect outbreak, prevention and insect suppression is a combination of silvicultural management during the period the stand is growing, of suppression work when you do get outbreaks, and of salvage work after you have had the outbreak and sustained some mortality. The three have to be handled together.

The National Forests have some particular problems with pests that may not exist on private land because of the state of management that the National Forests have received up until this time.

Old growth trees, by their very nature, tend to be subject to certain pests such as bark beetles. They are just more susceptible to it. Younger trees can resist some sort of bark beetle invasion, whereas old trees can't. When old trees don't, you get a bark beetle buildup and epidemic which can then either invite the need to do some suppression work or to do some intensive management to get ahead of the outbreak and do some salvaging.

So, each pest calls for different kinds of activity, management, suppression and salvage.

DOUGLAS FIR

Mr. YATES. What is the life of a Douglas Fir before the loggers get to it? In your old growth you have trees that are 250 years old.

Mr. CROWELL. Douglas Fir trees can live to be as much as 400 or 450 years old if they survive all of the trials and tribulations that living things are subjected to.

Mr. YATES. Your old growth stands then are very strong trees. They still have 150 years to go.

Mr. CROWELL. Well, they are not growing very much. They aren't very vigorous trees. They are susceptible to pest outbreaks to a greater degree than younger and more vigorous trees would be.

Mr. YATES. Well, if I understand you correctly, I asked you yesterday how old the old-growth trees were, you said 250 years. If they have a projected life of 400 years then they are in middle age then, aren't they?

Mr. CROWELL. Trees grow rapidly up to a certain age. The Chief indicated yesterday different species in different locations will have different culminations of growth. Once they have achieved that maximum growth rate, they continue to grow at a much slower pace. Eventually, the growth rate stops entirely and then a stand will begin to lose volume as a result of natural causes.

That process can be interrupted at any point in life just as any human being might be attacked by a disease or have some accident befall him or some natural tragedy.

The same thing can happen to individual trees and to forest stands.

SURVEY RELATED TO INSECT AND DISEASE OUTBREAK

Mr. YATES. Well, in 1981 you surveyed 750 million acres aimed at protecting and evaluating potential insect and disease outbreaks; is that correct?

Mr. CROWELL. Yes.

Mr. YATES. You had estimated you would be able to cover 493 million acres.

Mr. OHMAN. Yes, I think that is correct.

Mr. YATES. In 1983 you want $11.4 million, which is a decrease of $2.3 million, and that will allow you to survey another 411 million acres, won't it?

Mr. OHMAN. Yes, sir.

Mr. CROWELL. It would be the same acres, wouldn't it, being resurveyed?

Mr. OHMAN. No, not necessarily. It would depend on the pest situation.

Mr. YATES. Well, where would you be running this survey, do you think, or don't you know that?

Mr. OHMAN. Well, I suspect our pest control people have a pretty good idea, but they have to remain quite flexible and do it in an area where we may be having some outbreaks.

Mr. CROWELL. We have got about 750 million acres of wood land in the country of which about 490 is commercial forest land. We aren't surveying anything but forest land and I hope we aren't surveying much except commercial forest.

Mr. YATES. You had estimated that you would do 493 million acres in 1981, you had 750? How did you happen——

Mr. OHMAN. That increase was caused by the increase in gypsy moths, for one thing, and also we did have to increase that survey acreage.

Mr. YATES. Was that of epidemic proportion?

Mr. OHMAN. Yes, in the case of gypsy moths.

Mr. YATES. Did your additional surveys in 1981 result in reduced suppression costs?

Mr. OHMAN. No, I don't believe so. I would think that it mostly gave us a better hand on what suppression needs were going to be.

Mr. YATES. That is 1981. Based on that survey, do you know what your needs are for 1983?

Mr. OHMAN. No, for 1983 it is too early, really to tell. We will be getting a better handle this year from the 1981 surveys. The suppression needs are changing all the time. It is really kind of a floating target and it is really not until we get right down to the final decision, spray or don't spray, that we can really say with any degree of certainty.

INCREASED FUNDING IN PEST SUPPRESSION

Mr. YATES. Are insects as much of a threat to the life and health of a tree as fire?

Mr. OHMAN. Yes.

Mr. YATES. Shouldn't we be taking much precautions to prevent trees being threatened by insects as we do for fire?

Mr. OHMAN. Yes.

Mr. YATES. Are we doing that in this budget?

Mr. OHMAN. We are hitting the highest priority needs in this budget for pest control.

Mr. YATES. Are forests likely to be hurt by pests as a result of the amount of money this budget calls for?

Mr. OHMAN. Yes, sir; I mentioned we will accept some losses.

Mr. YATES. Can you reduce those losses by adding money to your budget?

Mr. OHMAN. Yes, we could, but they would not be the highest priorities.

Mr. YATES. What does that mean? If you are threatened with losses, what do you consider to be a high priority?

Mr. OHMAN. Well, I think there are acceptable losses and unacceptable losses. I think we have to make some——

Mr. YATES. Give us an example of an acceptable loss.

Mr. **Ohman**. An acceptable loss may be some infestation in a stand where we really don't have very good markets and the value of that timber is relatively low.

Mr. **Yates**. So that our losses that will be suffered as a result of this budget will be in those areas?

Mr. **Ohman**. Primarily.

Mr. **Yates**. And not in other areas where you have good markets?

Mr. **Ohman**. No, I expect we will take growth losses in some areas where we do have good markets.

Mr. **Yates**. How do you cut down the possibility of those losses, by spraying and by doing other kinds of pest control work?

Mr. **Ohman**. Pest management is an almost infinitely large kind of a thing. There are many, many things you can do.

Mr. **Yates**. Well, this is true of almost anything that we face. The question is: Would the amount of extra money that we put into a budget for pest suppression be cost effective in reducing the losses that you know are going to take place in good market areas?

Mr. **Ohman**. Yes, to a great extent.

Mr. **Yates**. It took me some time, but I think I finally got an answer from him.

Can you identify those for the record and what the additional investment ought to be in protecting them?

Mr. **Ohman**. Yes, sir.

[The information follows:]

FUNDING NECESSARY TO AVOID PEST DAMAGE MORTALITY

Estimating suppression needs far in advance of date of actual use is difficult and subject to considerable revision. Our best estimate at the present time is that approximately $21.5 million of additional funds could be cost-effectively invested for insect and disease suppression activities on both Federal and non-Federal lands in fiscal year 1983.

The Administration's policy is that priority should be given to protecting Federal lands from major outbreaks that do serious economic damage. Our cooperative suppression efforts should be limited to outbreaks where other lands are intermingled with Federal lands or where Federal assistance is required to insure that sound pest management approaches are utilized. We expect States and the private sector to fund suppression needs on their lands as part of the landowners normal responsibilities.

The fiscal year 1983 budget will continue this direction in sorting out State and Federal roles. We will continue our efforts in research, methods development, and technical assistance to help States deal with forest insect and disease pest.

Mr. **Peterson**. Anything we do would be a pure estimate because we are estimating a pest outbreak 18 months ahead, which is a very difficult thing to do.

Mr. **Yates**. Your expert is saying that we ought to be doing it.

Mr. **Peterson**. He is saying there are opportunities that are not taken advantage of.

Mr. **Yates**. That is right. How else would you phrase it?

Mr. **Peterson**. I guess that is the way to phrase it.

Mr. **Yates**. Thanks, Dr. Ohman, I appreciate it. I hope that your answer doesn't hurt you with Mr. Crowell.

Mr. **Crowell**. If it had been, I would have continued to interrupt.

COOPERATIVE PEST ACTION PROGRAM

Mr. Yates. What portion of the increase in the budget is related to the cooperative action program?

Mr. Ohman. The decrease is relatively small in the cooperative pest action program. In fact, we have had to make a change in our 1983 Explanatory Notes. We showed the grants being decreased by $600,000 and we had to correct the number. It is $164,000. That is on page 71. That was as a result of some reevaluations we made so that the decrease is relatively minor.

Mr. Yates. Would you put in the record a description of what the program involves?

[The information follows:]

Cooperative Program in Forest Pest Management

The Cooperatiave Forest Pest Action Program is part of the Survey and Technical Assistance activity. The program shares the cost of maintaining a State-level technical staff and their survey, evaluation, and training activities for providing pest management assistance to non-Federal forest land managers. The Forest Service shares this cost up to a maximum of 50 percent based on workload analysis for each State.

Mr. Yates. Have you been in consultation with any of the States respecting cost-sharing assumptions on the cooperative program?

Mr. Ohman. Yes, we have.

Mr. Yates. Have you worked out your relationship with them?

Mr. Ohman. Yes. We pretty much polled them as to how they might react to reductions.

Mr. Yates. And were they overjoyed?

Mr. Ohman. No, sir.

Mr. Yates. What was their reaction?

Mr. Ohman. Well, kind of a mixed reaction. Some States said that they would be able to go ahead and some would not.

Mr. Yates. Some States would not be able to go ahead with what?

Mr. Ohman. We polled them based on the 1982 proposed reduction in insect suppression cost sharing specifically.

Mr. Peterson. They would not go ahead with some pest suppression projects is what it means.

Mr. Yates. The pests can look forward to next year as a survivable year, right? Would you say that? You are in a pretty powerful position. Which pests are you going to let live and which are you going to let die?

Mr. Ohman. In many cases we leave that up to the States.

Mr. Yates. They are not going to have much choice, are they, if their funds are cut back?

Mr. Crowell. I am sure we will give very considerable consideration to allowing committee chairmen to survive.

Mr. Yates. There is an implication there.

Mr. Crowell. All in fun.

Mr. Yates. What is your current assessment of the Federal role in the activity? Can States use their State funds to meet the Federal match?

Mr. Ohman. Yes, they can, under present rules. They can and do match suppression on a matching basis up until now.

LOSSES DUE TO PESTS

Mr. **Yates**. Would you put in the record a statement of the annual losses due to pests in both industrial and nonindustrial private forests and State forests, both in terms of timber volume and value?

Mr. **Ohman**. I will be glad to do that.

[The information follows:]

Timber Losses Due to Pests on Private Lands

Estimated national unsalvaged timber mortality volume due to insects and diseases on industrial lands is 365 million cubic feet and on non-industrial private lands is 1.1 billion cubic feet. Assuming that this unsalvaged mortality occurred in timber that would have been harvested in the same year that it was killed, the value of the timber would be approximately $185 million on industrial land and $573 million on nonindustrial private land.

EXTENT OF PEST SUPPRESSION

Mr. **Yates**. What is the number of acres you are going to be able to treat at the level of your 1983 request?

Mr. **Ohman**. Again, it is very hard to predict these things this far in advance.

Mr. **Yates**. How many acres would your budget allow you to treat in the absence of any dire emergency, just normal husbandry? Do you want to put it in the record?

Mr. **Ohman**. Yes.

Mr. **Yates**. Would you also put in the record a comparison of that figure with the total acreage requiring treatment in 1982 and 1983?

Mr. **Ohman**. Yes.

[The information follows:]

ACREAGE THAT COULD BE TREATED AND PLANNED FOR TREATMENT IN FISCAL YEAR 1982 AND 1983, BY FEDERAL AND NON-FEDERAL LANDOWNERSHIPS

[Million acres]

Fiscal year	Could be treated		To be treated	
	Federal	Non-Federal	Federal	Non-Federal
1982	1.1	2.5	1.0	1.80
1983	0.8	2.6	0.46	0.08

The total acreage that could be treated would include low priority projects where the economic returns are unsatisfactory or where the need for a Federal role is less compelling.

INSECT AND DISEASE SUPPRESSION FUNDS

Mr. **Yates**. You state in the justification that total insect and disease suppression needs for fiscal 1983 are suspected to be about $25 to $30 million. Is that estimate based on all Federal, State and private lands that are possibly going to be affected?

Mr. **Ohman**. Yes, that would be all State, private and Federal lands. That is a very rough estimate.

Mr. **Yates**. Suppose you had the old cost-sharing assumption, the 47 Federal, 53 non-Federal still in existence, would that change your answers?

Mr. **Ohman**. No, sir. That $25 to $30 million estimate was Federal costs based on the old cost-sharing rates. The total project costs from all sources would be in excess of that.

NEW GYPSY MOTH TECHNOLOGY

Mr. **Yates**. On page 74, you talk about bringing new gypsy moth management technology on line. Is that what Mr. McDade objects to? Doesn't he prefer the old kind where you had more money appropriated?

Mr. **Ohman**. No, this actually will be a proposed pilot test to be done in Maryland to test all of the new technology that is coming out of research. All related research will be put together in one package in an area where the gypsy moth is just now moving in to give a good demonstration and a kind of pilot test.

Mr. **Yates**. Is this separate and apart from what you have discovered from your trips to Europe? No, it is Mr. Buckman's trips to Europe. He is going to Europe now to find out how to deal with the gypsy moth on the basis of what he is going to learn from the Germans and the Poles and the Yugoslavs, as I remember his testimony. You have a different technique, right, this new technique you are putting on line?

Mr. **Ohman**. This is as a result of recent research findings of various kinds and will include combinations, what we call integrated pest management, in which you use every tool that you have in your bag.

You use direct suppression with chemicals and biological controls.

Mr. **Yates**. In other words, you are going all out against the gypsy moths.

Mr. **Ohman**. We are going to try everything.

Mr. **Yates**. I wish Mr. McDade was here to hear that. You didn't tell him that yesterday.

Mr. **Crowell**. Because it wasn't happening in Pennsylvania. This is a pilot project to test the effectiveness in actual application of some of the latest research techniques which seem to show promise.

Mr. **Yates**. What is the cost of it going to be?

Mr. **Ohman**. In 1983 in Forest Pest Management we budgeted $492,000.

TUSSOCK MOTH

Mr. **Yates**. Let's talk about the Tussock moth now. You have been dealing with the Tussock moth over a 3-year period for treatment of 50,000 acres, right?

Mr. **Ohman**. No, this is to produce the virus and to produce 50,000 acre equivalents, enough virus to treat 50,000 acres.

Mr. **Yates**. That is right.

And how does this budget affect that goal? Does it affect it at all?

Mr. **Ohman**. We would continue that. It is extremely high priority.

Mr. **Yates**. That is one of your highest priorities?

Mr. **Ohman**. Yes, sir, the virus is not available elsewhere.

Mr. CROWELL. Mr. Chairman, I might interject is an example where research has been given high priority, and it is showing good signs of paying off because we think we have some viruses that will take care of tussock moth outbreaks in the future. Some years ago there was a very bad outbreak in northeastern Oregon and southeastern Washington, which you remember we eventually had to spray with DDT over a very large acreage after the third year of the outbreak.

That was very expensive and, of course, it was preceded by a very difficult battle.

Mr. YATES. What year was that?

Mr. CROWELL. About 1973 or 1974, somewhere in there.

Mr. OHMAN. It was 1974.

Mr. YATES. What was the effect of the DDT?

Mr. CROWELL. It took care of the outbreak.

Mr. YATES. Did it also take care of the birds?

Mr. CROWELL. No. It was done under very carefully monitored applications. The impact on other wildlife was minimal. I wouldn't say there wasn't any, but most of the adverse effect of DDT had been cumulative. All the chlorinated hydrocarbons tended to accumulate, and one of the ways they were manifested was in the egg shell softening of certain species of birds—not all species. It was a matter of buildup in the birds.

Mr. YATES. Pelicans and eagles.

Mr. CROWELL. The falcon was the best example of that. The brown pelican——

Mr. YATES. Which almost didn't survive it.

Mr. CROWELL. Right. It had quite a decline in population. Since then the research that has been done on tussock moth virus control techniques has been very promising, and we may have a breakthrough. We would like to achieve similar results in the future on gypsy moths.

Mr. YATES. Are you doing any spraying with DDT now?

Mr. CROWELL. No.

Mr. YATES. Are you doing any spraying with 2,4,5-T?

Mr. PETERSON. No. It is still in emergency suspension as far as use on forests is concerned. It is still used on rangeland and some agricultural crops, but not in the forest.

Mr. CROWELL. It is not an insecticide. It is an herbicide.

Mr. YATES. It has a comparable effect, doesn't it?

Mr. CROWELL. It has effects which are questioned.

FIRE PROTECTION PROGRAM

Mr. YATES. How much funding have you given to the States for the analysis of the economic efficiency of the fire protection program? Do you want to put that in the record?

Mr. OHMAN. Yes. We will provide that for the record.

[The information follows:]

FIRE ANALYSIS FOR STATES

The Forest Service has targeted $300,000 in 1983 for continuation of the economic analysis of the fire protection program. These funds will be used to complete the national economic analysis of fire protection on non-Federal wildlands by adding additional sample areas. The funding history for this purpose is; 1980 = $22,000, 1981 = $122,600, 1982 = $235,000.

RURAL COMMUNITY FIRE PROTECTION PROGRAM

Mr. YATES. Is this program different from the Rural Community Fire Protection program in another part of the USDA?

Mr. OHMAN. Yes, it is. The rural community fire program, while it is contained in our authorizing legislation, is funded through the Farmers Home Administration, and that money is used primarily for direct grants to rural community fire organizations for purchase of equipment, training, et cetera.

RURAL FOREST ASSISTANCE

Mr. YATES. Rural forestry assistance, you want $12.4 million. Will this program help meet the goal of increasing the share of timber supplies from nonindustrial private lands by the year 2030?

Mr. OHMAN. Yes, it will help to meet it.

URBAN FORESTRY ASSISTANCE

Mr. YATES. Would the urban forestry program do that, too?

Mr. OHMAN. No, sir.

Mr. YATES. What is the difference?

Mr. OHMAN. Well, the urban forestry program is directed towards urban forests and the management of urban forests.

Mr. YATES. But I mean as far as the goal is concerned.

Mr. CROWELL. Urban forests wouldn't be subject to harvest.

Mr. OHMAN. There might be some products, fuelwood and so on, that would come from urban forests, but it would not be a big source of supply.

SEEDLING PRODUCTION AND NURSERY TREE IMPROVEMENTS

Mr. YATES. Let's talk about seedling production and nursery tree improvement. Are the States going to make up the difference on outputs based on your proposed reduction?

Mr. OHMAN. We really don't know at this point. Some States I am sure will. Some States will receive pretty good support from the State legislature.

REFORESTATION

Mr. YATES. Are reforestation activities on nonindustrial lands at a satisfactory level?

Mr. OHMAN. No, sir, they are very unsatisfactory.

Mr. YATES. They are way behind, aren't they?

Mr. OHMAN. Yes, sir.

Mr. YATES. Should the Federal Government do anything to correct this situation?

Mr. OHMAN. Well, we already are. Mr. Crowell mentioned in his opening remarks that we have tax incentives going into effect, and the forestry incentives program that is in effect. But right now we have a problem and we are monitoring it very closely.

Mr. YATES. What is your problem?

Mr. **OHMAN**. Mostly lack of softwood regeneration following harvest in nonindustrial private forest lands in the South. We are estimating that only about one-third of the acreage that is harvested is regenerated to softwoods following harvest. This is only on the small nonindustrial private forest lands. The industries are doing an excellent job.

RURAL FORESTRY PLANS

Mr. **YATES**. Do State governments have the option to carry out rural forestry plans under other authorities as urban areas do?

Mr. **OHMAN**. No, except that as their State legislatures would provide the funds, they can and do carry out their own programs.

Mr. **YATES**. Do you think we ought to eliminate the rural forestry program?

Mr. **OHMAN**. No, sir, I don't. It has been an extremely effective means of cooperation. I see it as an early example of the New Federalism, a cooperative relationship with the States. There has been a lot of progress made there.

1985 RPA UPDATE

Mr. **YATES**. Would your planning assistance plans be adequate to provide information needed for your 1985 RPA update?

Mr. **OHMAN**. We hope so.

Mr. **YATES**. We hope so, too, but will it be adequate?

Mr. **OHMAN**. We think we can.

Mr. **YATES**. Could you do it? Because it is important that that be done.

Mr. **OHMAN**. It would be a minimum.

Mr. **YATES**. Do you have more money for it? How much money will you require for that?

Mr. **OHMAN**. It depends on a level of planning that we would expect to get from the States. But we expect that with this amount of money we will be able to get most of the important States up to a minimum level of planning.

Mr. **YATES**. How important is the 1985 RPA update? Very important?

Mr. **OHMAN**. Yes.

Mr. **YATES**. Well, do you think the committee ought to know how much money they need for the 1985 RPA update?

Mr. **OHMAN**. I guess I would have to defer that to Mr. Beasley here. Are you speaking of RPA in general or the State planners?

Mr. **YATES**. With the State. Why don't you consider that and put your response in the record? I think this is the kind of thing you ought to think about.

[The information follows:]

STATE NEEDS FOR RPA

The States' contributions to the 1985 RPA Update will largely be completed by October of 1982. This includes identification of needs/opportunities, goals, and implications and provision of multiyear program data for development of Program Alternatives. Beyond fiscal year 1982, State involvement in the Update will primarily be in review and economic validation. The fiscal year 1983 budget for cooperative planning is $975,000 which is adequate for State participation in RPA.

Mr. **Yates**. How do you go about determining priority basis for technology transfer projects in 1983?

Mr. **Ohman**. When we considered our budget constraints, this is one item that we figured would really be better to eliminate as a separately funded item. We did that also with organization management assistance. The funding levels that we might have available were so small as to be ineffective, and it would be more effective to just eliminate them.

Mr. **Yates**. Does that mean the technology transfer effort has been a failure?

Mr. **Ohman**. No, sir, it doesn't. And we intend insofar as possible within the other line items of our budget, to continue to do technology transfer. The Maryland pilot project on the gypsy moth would be an example of that. That could well be attributed to technology transfer.

GIFFORD PINCHOT INSTITUTE

Mr. **Yates**. You are not requesting any funds for the Pinchot Institute in Pennsylvania? You talk about the minimum level of subsistance, maintenance and operation.

Mr. **Peterson**. We are not providing a separate line item. We plan to continue just the minimum maintenance and operation level there of $230,000.

Mr. **Yates**. How much did you spend in 1982 on it?

Mr. **Peterson**. We spent $470,000.

Mr. **Yates**. How effective is the work at Pinchot Institute?

Mr. **Peterson**. We have done a variety of things there in terms of training and so on. It is one of those things that we feel we can continue on a priority basis.

Mr. **Yates**. Would the minimum level that you have set aside allow the Institute to be opened for tourists?

Mr. **Peterson**. Yes, it will, on a somewhat reduced schedule.

FIRESCOPE

Mr. **Yates**. Does it look as though the States are going to take up the FIRESCOPE?

Mr. **Peterson**. States are implementing the parts of the FIRESCOPE that have already been developed.

Mr. **Yates**. Will they make up the difference in Federal funding?

Mr. **Peterson**. They will probably stretch out the rate of implementation.

LAND MANAGEMENT PLANNING

Mr. **Yates**. Let's talk about the National Forest System now. Is the amount of funding you are allocating to the funding process adequate to allow you to meet the planning schedule?

Mr. **Peterson**. You are talking about land management plans?

Mr. **Yates**. Yes.

Mr. **Peterson**. Yes, we will complete the land management planning probably sometime in 1984. The legislation allows this until September 30, 1985.

Mr. YATES. And this will allow you to give adequate consideration to competing land uses?

Mr. PETERSON. Yes, sir, as part of that process.

MINERAL LEASES

Mr. YATES. There is a solicitor's opinion that the Government cannot stop development once a lease is issued. That is correct on minerals area management, isn't it?

Mr. PETERSON. I think that was——

Mr. YATES. The Court held that the Government couldn't stop the lease?

Mr. PETERSON. I think you are talking about the Department of Interior solicitor under the standard lease.

Mr. YATES. That is right.

Mr. PETERSON. We have just adopted, and also BLM has just adopted what is called a contingent right stipulation which will reserve certain rights to the Government to carefully phase in the development activity. But I believe you are referring to the solicitor.

Mr. YATES. Well, are you changing your leasing procedures because of that opinion?

Mr. PETERSON. Not because of that opinion, but in order to simplify and streamline leasing procedure. Mr. Chairman, only about 2.5 to 3 percent of the leases that are issued ever get drilled on. So in order to prevent spending a lot of money up front on environmental analysis and environmental statements, we are going into a phased system where we will evaluate the exploration phase and then reserve the right to introduce additional stipulation when that process is completed. That will be published in the Federal Register today, I believe.

LEASE APPLICATIONS IN WILDERNESS AREAS

Mr. YATES. How many applications and drilling requests in wilderness areas did you approve in 1981? Do you know?

Mr. HOUSLEY. Mr. Chairman, we have 39 existing leases in statutory wilderness. There are 1,115 pending lease applications in statutory wilderness. And in proposed wilderness, further planning areas and wilderness study areas there are 745 leases.

Mr. PETERSON. Mr. Chairman, this is Mr. Housley, I believe you know.

Mr. YATES. I know him very well.

Mr. PETERSON. The only leases we issued regarding wilderness areas last year was nonsurface occupancy where there is no permission to occupy the surface of the wilderness area. There were none issued last year inside a wilderness area.

Mr. YATES. What is the nature of the leases?

Mr. PETERSON. Well, the leases were granted by the Secretary of the Interior. We issued a lease in which the drilling itself would be outside the wilderness area. It affects oil that is under part of the wilderness area, and technically the lease has to include the wilderness area, although there is no surface occupancy allowed.

COSTS OF PROCESSING APPLICATIONS AND DRILLING REQUESTS

Mr. YATES. Your justification talks about an increase in the unit cost through a higher proportion of activities in complex and difficult situations, including lease applications and drilling requests. What portion of your workload did such cases represent? What are the increased processing costs?

Mr. PETERSON. I will give you a general answer. We have got a significant activity in both the Eastern Overthrust Belt which runs down through the Appalachians, and the Western Overthrust Belt which goes on in Wyoming and Montana. It is a very difficult mountain area. Percentagewise, those probably represent something like 25 percent or 35 percent of our leases.

Mr. YATES. And this results in increased processing costs?

Mr. PETERSON. Yes, sir.

Mr. YATES. Well, you talked about increased workloads, 6,000 completions. How much of your increased workload do you estimate is related to the wilderness?

Mr. PETERSON. I think Mr. Housley gave you that number. There is about 1,500.

Mr. YATES. That is what he said he was spending. I wonder what the increased part was. Did you just begin these?

Mr. PETERSON. Most of the applications for leasing wilderness are of quite recent origin, in the last 2 or 3 years. And also, you remember the wilderness areas are withdrawn at the end of 1983. So this is an unusual number.

Mr. YATES. Well, are you required to monitor the leasing activities?

Mr. PETERSON. Yes, the U.S. Geological Survey also has some monitoring activities because they handle the onsite administration.

Mr. YATES. Is there money in the budget to carry that on?

Mr. PETERSON. That is in the USGS budget and Minerals Management Service. Now we have some responsibilities also. For example, issuing mineral leases, and permits of various kinds, for roads and powerlines. We are involved in that activity and we have money in the budget for that purpose.

INCREASED WORKLOAD FOR COMMON VARIETY MINERALS

Mr. YATES. You increase common variety minerals by 28 percent. Why are you projecting a 31 percent increase in workload when there was only an 11 percent increase in 1979.

Mr. HOUSLEY. The last part of the question?

Mr. YATES. I have to raise my voice, too. You project a 31 percent increase in workload for common variety minerals. The trend since 1979 has been 11 percent per year. Why do you project that much of an increase?

Mr. HOUSLEY. This just pertains to the increased level of activity in construction and road development, and that sort of thing, for sand and gravel and other common varieties.

Mr. YATES. Why? If you project an 11 percent increase per year since 1979, why do you say the increase will be 31 percent? You almost triple it. Why such a drastic increase in your workload? How do you arrive at that?

Mr. **Housley**. This is just based on the field's estimate of the number of applications and permits that they will have to deal with in the year ahead.

Mr. **Peterson**. There is quite a buildup of mineral activity. These are field estimates.

LAND SALES AND EXCHANGES

Mr. **Yates**. Is there anything included in your budget under the land sale program to raise revenues?

Mr. **Peterson**. There is no money specifically for that activity in the budget.

Mr. **Yates**. How are you going to handle it then?

Mr. **Peterson**. On some of the preliminary work we used money that we would ordinarily use for land exchanges.

Mr. **Yates**. How many acres do you anticipate will be involved in the land-use program in 1983?

Mr. **Peterson**. We have a number in here.

Mr. **Yates**. Do you know where the lands are that you were going to exchange?

Mr. **Peterson**. Yes, we do.

Mr. **Yates**. Will you put that in the record?

Mr. **Peterson**. Yes, we will.

[The information follows:]

Fiscal Year 1983
Location and Related Acres of Land to be Exchanged [1]

STATE	FOREST	FEDERAL ACRES
Alabama	NF's in Alabama	945
Alaska	Tongass	10,122
Arizona	Coconino	129
	Prescott	5,976
	Sitgreaves	38
TOTAL		6,143
Arkansas	Ouachita	1,000
	Ozark	630
TOTAL		1,630
California	Angeles	366
	Cleveland	3,755
	Eldorado	1,418
	Inyo	1,023
	Klamath	16,500
	Lassen	4,818
	Los Padres	1,260
	Mendocino	2,820
	Modoc	7,080
	Plumas	9,278
	San Bernardino	641
	Sequoia	53
	Shasta-Trinity	31,747
	Six Rivers	2,838
	Stanislaus	3,745
	Tahoe	4,753
TOTAL		92,095
Colorado	Arapaho	2,985
	Gunnison	7,593
	Pike	1,263
	Rio Grande	530
	Roosevelt	3,492
	Routt	1,520
	San Juan	250
	Uncompahgre	273
	White River	5,405
TOTAL		23,311
Florida	NF's in Florida	734
Georgia	Chattahoochee-Oconee	1,810

[1] This is a list of exchanges to be worked on in 1983. The Federal land actually exchanged during a given fiscal year averages 50-60,000 acres.

STATE	FOREST	FEDERAL ACRES
Idaho	Boise	31,167
	Caribou	40
	Idaho Panhandle	3,782
	Sawtooth	3,269
	Targhee	69
TOTAL		38,327
Illinois	Shawnee	3,022
Indiana	Hoosier	3,598
Kentucky	Daniel Boone	1,658
Louisiana	Kisatchie	1,300
Michigan	Hiawatha	15,782
	Huron	2,040
	Manistee	7,670
	Ottawa	27,151
TOTAL		52,643
Minnesota	Chippewa	2,413
	Superior	10,936
TOTAL		13,349
Mississippi	NF's in Mississippi	3,170
Missouri	Mark Twain	6,080
Montana	Beaverhead	2,075
	Bitterroot	4,906
	Custer	540
	Deerlodge	1,273
	Flathead	4,564
	Gallatin	3,590
	Helena	225
	Kootenai	3,383
	Lewis & Clark	1,527
	Lolo	24,279
TOTAL		46,362

STATE	FOREST	FEDERAL ACRES
Nevada	Humboldt	5,000
	Toiyabe	120
TOTAL		5,120
New Mexico	Carson	12
	Cibola	752
	Lincoln	57
TOTAL		821
North Carolina	NF's in North Carolina	3,700
Ohio	Wayne	2,747
Oregon	Deschutes	7,600
	Fremont	13,305
	Malheur	200
	Mt. Hood	5,645
	Ochoco	14,478
	Rogue River	3,380
	Siskiyou	4,353
	Siuslaw & Willamette	12,318
	Umpqua	1,480
	Umatilla	13,841
	Wallowa-Whitman	21,340
	Winema	4,017
TOTAL		101,957
Pennsylvania	Allegheny	17,047
South Carolina	Francis Marion	1,333
South Dakota	Black Hills	320
	Custer	1,080
TOTAL		1,400
Tennessee	Cherokee	175
Texas	NF's in Texas	950

STATE	FOREST	FEDERAL ACRES
Utah	Ashle	4
	Dixie	40
	Wasatch	92
TOTAL		136
Vermont	Green Mountain	555
Virginia	George Washington	365
	Jefferson	413
TOTAL		778
Washington	Colville	12,340
	Gifford Pinchot	17,913
	Mt. Baker-Snoqualmie	34,720
	Okanogan	7,100
	Olympic	6,822
	Wenatchee	36,057
TOTAL		114,952
West Virginia	Monongahela	—
Wisconsin	Chequamegon	253
	Nicolet	1,550
TOTAL		1,803
Wyoming	Bridger-Teton	1,380
	Medicine Bow	726
	Shoshone	455
	Thunder Basin	80
TOTAL		2,641
GRAND TOTAL		562,414

Mr. YATES. How do you go about identifying that land? This is an exchange. Is this also land to be sold?

Mr. PETERSON. Well, we are going through a process of first looking at what the criteria should be for the sale of land, and then identifying land that would meet that criteria.

Mr. YATES. Would you put a statement about what you are doing into the record, please, as to how you are going about this?

Mr. PETERSON. Yes, we will do that.

[The information follows:]

CRITERIA USED TO DETERMINE LANDS AVAILABLE FOR DISPOSAL UNDER THE PRESIDENT'S LAND SALES PROGRAM

Generally, the lands that are presently managed efficiently for their maximum net public benefits will not be identified for disposal. This includes lands returning market value income, areas with special values such as wilderness, areas with high risk to life and property, lands and facilities necessary to the research role, and lands in active land exchange proposals.

The following categories or criteria list the types of Federal properties that have been identified as lands which either have a higher value or can be more efficiently managed if placed in nonfederal ownership.

Category	Remarks
1. Areas within the purview of the proposed Small Tracts Act......	These are lands encumbered with innocent occupancy trespass that could be sold to individuals occupying the land. Also included are residual slivers of land remaining between patented mining claims and unused rights-of-way.
2. Free special-use permit areas with permanent improvements held by local governments, States, or others..	
3. Unused administrative sites and other facilities........................	Categories 3 and 4 include sites for disposal by GSA under their surplus property procedures as well as other sites for which there is presently no sale authority and those high value sites where the research activities can be relocated without serious impact.
4. Unnecessary or unessential research lands and facilities..........	
5. Unclassified LU lands..	These are Federal lands that were purchased as part of the land utilization program during the 1930's and are presently managed by the Forest Service but are not essential for National Forest System purposes.
6. Land essential for community expansion, including commercial forest lands.	
7. Lands suited for development but not for community expansion purposes.	
8. Lands forming an integral part of a private operation, e.g., serving as base ranch property to qualify for term grazing permits.	
9. Isolated parcels that are unused, underutilized, or require excessive development or administrative costs, including commercial forest lands.	
10. Reserved mineral rights (where the Government has disposed of the surface ownership).	Most of these are located in old LU areas where the surface has been disposed of but 75 percent of the mineral rights were reserved by the Federal Government. They are also located under land that was disposed of by exchange where the mineral rights were reserved by the Federal Government.
11. Lands with mining claims where the lands would otherwise be available for potential sale.	These lands cannot be sold until the claim is relinquished or is ruled invalid. The claimant has temporary title to the claim area and is valid against all other parties except the United States.
12. Inundated lands of water development projects where control of water surface is not needed.	In some areas established water authorities have indicated an interest in acquiring these lands.
13. Lands conveyed to a State or local government for public use purposes and the conveyance document contains a reversionary clause for non-public use.	

Mr. YATES. Is there an estimate of cost savings that should result by maintaining the program at the 1982 level?

Mr. PETERSON. I don't have such a number available, Mr. Chairman.

Mr. YATES. If you can find one, would you put it in the record?

Mr. PETERSON. Yes, sir.

[The information follows:]

LAND EXCHANGE COST SAVINGS

We do not recommend any changes in the 1983 level of funding. Potential savings can be realized in future years when the National economy improves and the rate of inflation along with the Federal deficit is reduced.

Based on the actual savings in fiscal year 1981, we estimate that a program at the 1982 level would save approximately $5 million in future landline location and maintenance costs. There would also be a reduction of approximately 200 special-use permits, rights-of-way, and trespass cases resulting in a savings in reduced landownership record maintenance and other savings in administrative costs would also be realized.

LANDLINE LOCATION

Mr. YATES. What is the status of your survey program? Have you moved forward to any significant degree? Landline location, $26.1 million, a $300,000 increase. It is an important program because we have to worry about questions of trespass and recreation and so forth. Is this an adequate sum to deal with this program?

Mr. PETERSON. Yes. Much of this is related to being sure we know where our land is in connection with either timber sales or minerals activities. The increase is related to the additional activity. It is a long-term program. It would take us until after the year 2000 to complete the operation.

Mr. YATES. Well, according to your statement the benefits come from trespass and recreation, don't they?

Mr. PETERSON. No, the benefits come from preventing trespass.

Mr. YATES. And permitting recreation?

Mr. PETERSON. Yes, sir.

Mr. YATES. And providing recreation.

Mr. PETERSON. And also knowing where the boundary is when we sell timber, when we allow leases, or when we build a road to some other activity, to be sure whether we are on the right-of-way or not.

SPECIAL USE PROGRAM

Mr. YATES. You are deferring reviews. Is there a reason for deferring it if you are going to lose $1 million in 1984 or later?

Mr. PETERSON. Deferring what reviews, Mr. Chairman?

Mr. YATES. Special uses, the permit program. You charge a fee.

Mr. CROWELL. We charge a fee for special uses.

Mr. YATES. You are deferring fee reviews. You are not going to do it next year.

Mr. HOUSLEY. This refers to the review of the annual fee that is charged for the use. We have a program to systematically, at intervals, review the charges that are made for the use. We may have to defer some of those until future years.

Mr. YATES. The reason I asked the question is you are going to lose $1 million, which is what you make by the process of fee review.

Mr. HOUSLEY. Yes, sir. We will forego some receipts as a result of deferring those reviews.

Mr. **Peterson**. But you notice that what is happening is that in many cases the fee is very nominal. To make a review would not change it enough to pay for the cost of the review. It is this type of case we would be deferring. We are completing fee reviews on those where it makes a substantial difference. It is the least cost effective ones that we won't do.

USE OF CONTRACTS IN LAND LINE LOCATION

Mr. **Yates**. Well, your budget increase reflects a decrease in personnel and an increase in contracting. You are going to lose personnel in this activity. I am talking about land line location. Does that make sense to give up personnel and to look to outside contracting for this?

Mr. **Peterson**. You are looking at full-time equivalents there, and what we are saying is that in some cases rather than hiring people on the payroll for part of the year we would contract this. It doesn't mean it is going to cost more. In fact, we are going to do it in the most cost-effective way we can.

Mr. **Yates**. I am talking about the budget increase. You have got a budget increase of $23,200,000.

Mr. **Peterson**. Yes, sir.

Mr. **Yates**. But you are losing personnel.

Mr. **Peterson**. Those are full-time equivalents. Some of those are part-time people.

Mr. **Yates**. I see.

MAINTENANCE OF FACILITIES

You want an increase for maintenance of facilities by $1.5 million, and that is going to increase contractual work. What will the increase go for? What is the purpose of it?

Mr. **Peterson**. The first priority is on health and safety. Many of the buildings were built back in the CCC period. Some are for correcting serious deficiencies like wiring and other things that make them unusable, and some will go for energy conservation.

The buildings were built so long ago that we are heating all of the outside trying to heat those buildings.

Mr. **Yates**. What is the overall condition of Forest Service facilities, particularly recreation facilities? Can you say what the condition is generally at all your facilities? Is it deteriorating? Mr. Watt came in for the parks and said that the park facilities were in a deplorable condition. And GAO, on October 10, 1980, said the facilities in many national parks and forests do not meet health and safety standards.

What did you tell GAO—they were wrong—when you responded to this?

Mr. **Peterson**. No. They took a sample of facilities and then projected that over the entire area.

Mr. **Yates**. Was that a proper procedure?

Mr. **Peterson**. I think it was a reasonable procedure, yes. See, many of our recreation facilities date back to the CCC period, and we have been maintaining them and rebuilding them. We have some very new facilities. So we have facilities in all kinds of conditions. Some are in excellent condition and some are in very poor condition, and that is what the report reflects.

Mr. **Yates**. If your facilities do not meet health and safety standards, do you permit those facilities to be open and available to the public?

Mr. **Peterson**. Our basic policy is unless we can correct serious health and safety deficiencies we close the facility.

Mr. **Yates**. How many are closed as a result?

Mr. **Peterson**. We have closed several hundred in the last 2 years, mostly isolated facilities where it would not be cost effective to rebuild them. The cost would be too great.

Mr. **Yates**. What are you going to do in this budget? Are you going to close some more? Are you going to close them all?

Mr. **Peterson**. No. This budget is up a little bit in maintenance from last year, so we will continue to concentrate on health and safety items.

Mr. **Yates**. Well, is there enough money in this budget to correct and remedy your health and safety deficiencies?

Mr. **Peterson**. No.

Mr. **Yates**. Well, what is the danger to the public use then?

Mr. **Peterson**. As I say, we will need to correct any serious health or safety deficiencies or close the facility. In some cases we will have to make that kind of decision.

Mr. **Yates**. How many cases?

Mr. **Peterson**. I can't tell you how many cases. It would depend on the evaluation.

Mr. **Yates**. Who is going to evaluate?

Mr. **Peterson**. The standard policy is that we either correct a serious deficiency——

Mr. **Yates**. Does the field report to you on this?

Mr. **Peterson**. They tell us what they have done.

Mr. **Yates**. Does your office receive a report from the field on facilities that don't meet health and safety standards?

Mr. **Peterson**. No.

Mr. **Yates**. How do you know whether they have been corrected then?

Mr. **Peterson**. We couldn't possibly read all that material from the number of facilities we have.

Mr. **Yates**. How do you know what is going on out there then?

Mr. **Peterson**. We have a report from our field on two things: What it would take when they sent in a request and what it would take to eliminate most of this backlog in the facilities.

Mr. **Yates**. Do you have reports from the field on the condition of your recreation facilities that are proposed to be opened and reports which contain a description as to whether or not they meet health and safety standards?

Mr. **Housley**. We maintain such a record in a computerized data bank. We call it RIM—Recreation Information and Management.

Mr. **Yates**. These are the reports that come in from the field; right?

Mr. **Housley**. Yes, sir.

Mr. **Yates**. And was there money put into the 1982 budget to correct health and safety problems in your facility?

Mr. **Housley**. Yes.

Mr. **Yates**. What is happening to those?

Mr. **Housley**. A portion of those needs are covered and, as the Chief pointed out, we will close the others that we cannot cover.

Mr. **Yates**. Will you put into the record a statement on your recreation facilities containing the condition of those facilities; and also, containing a statement as to which of them had health and safety problems.

Second, that report should contain a statement as to whether or not funds were made available for correcting those health and safety deficiencies.

And, third, whether they have been corrected. And if not, when they will be corrected or whether the facilities have been closed.

Also, will you place in the record an update of that report for Fiscal Year 1983?

Mr. **Peterson**. Mr. Chairman, in order that you not get a stack of paper——

Mr. **Yates**. Well, don't put it in the record, then; furnish it to the committee, then. Put it in our files. But we want to make sure that we are giving the Forest Service problems the same consideration we gave the Park Service problems. We had reports from all of their regional representatives as to what had to be done, and I assume you will have the same kind of thing.

We want to make sure that the public is not going to be subjected to dangers as a result of health and safety deficiencies in the Forest Service.

[Committee note.—The information was provided for the committee files.]

INSPECTIONS FOR FIRE PREVENTION FACILITIES

Mr. **Yates**. Are you going to be able to maintain inspections for fire prevention with the personnel cutbacks that are scheduled for 1983?

Mr. **Housley**. We will be able to met the most important, highest priority needs in that respect.

Mr. **Yates**. Well, I wish you would put a statement in the record showing what all of your needs are and which of them you will be able to meet, which you categorize as the highest priority needs. Okay?

Mr. **Housley**. Yes, sir.

[The information follows:]

Fire Management Facilities

The following is a list of additional fire prevention and suppression facilities that could be constructed or rehabilitated. However, in view of the need to reduce Federal spending and the deficit, these lower priority facilities were not included in the fiscal year 1983 budget.

Priority	State	National Forest	Project	Amount [in thousands] [January 1, 1982 costs]
1	New Mexico	Cibola	Sandia Heliport	$77
2	California	Angeles	Fox Field Air Tanker Base	2,200

Priority	State	National Forest	Project	Amount [in thousands] [January 1, 1982 costs]
3	Arizona	Tonto	Payson Heliport Facilities	$250
4	New Mexico	Cibola	Albuquerque Air Tanker Base	80
5	North Carolina	Pisgah	Asheville Air Tanker Base	4,000
6	Idaho	Payette	McCall Smokejumper Base	4,000
7	California	Lake Tahoe Basin	Brockway Fire Station	575
8	Montana, Idaho	Regionwide	Replacement of Lookout Towers	600
9	Montana	Lolo	Missoula Aerial Fire Depot	1,348
10	California	Shasta-Trinity	Redding Emergency Service Center, Increments 2 and 3.	5,240
Total				14,501

FIRE PREVENTION

Mr. YATES. What is the increase in contracting for?

Mr. PETERSON. In which one?

Mr. YATES. Fire prevention. You have an increase in contracting of $1.1 million. Can you tell us what it is for?

Mr. PETERSON. I think that is just based on the increased costs of doing business. That is not an absolute program increase. That is based on our field estimate of what the contract costs will be.

Mr. HOUSLEY. Is that in "Detection"?

Mr. YATES. No. It is "Fire Prevention."

GROUND TANKERS

How many ground tankers are you going to have for fire attack?

Mr. PETERSON. I don't have that information.

Mr. YATES. Would you put that in the record, as well as the cost?

[The information follows:]

GROUND TANKERS

Approximately 1,200 ground tankers are expected to be in service during the fiscal year 1983 fire season. This count is subject to fluctuation of plus or minus 15 percent based on a combination of variables. Many of these are slip-on units which can be loaded on available trucks as needed. The cost is approximately $2.8 million.

Mr. YATES. With the increase of 5.2 million will you be able to increase the size of your crew?

Mr. PETERSON. Yes. We will be able to selectively add in a few locations to the size of crews, and restore them back almost to the size they were a few years ago.

Mr. YATES. How did you manage with a smaller crew? Did you hire extra people?

Mr. PETERSON. No, a tanker can be operated sometimes with five people, four people or three people and when you obviously reduce the crew you reduce the effectiveness of the crew.

FIRE AVIATION

Mr. YATES. Let's talk about fire aviation. Your tabulation of hours flown in 1980 shows almost half for aviation support of other activities. Are these costs funded from fire aviation?

Mr. **Peterson**. No, they are not. They are funded from the benefiting functions. For example, the detection you are talking about might be for air photography in connection with timber sales. They are always paid for by the benefiting function.

FIGHTING FOREST FIRES

Mr. **Yates**. Fighting Forest Fires on page 131 of your notification. You want $1 million as an initial amount which is down from $4.3 million. What is the impact of providing only $1 million for this initial activity?

Mr. **Peterson**. There is no impact. That is an item in which we have come back to Congress for supplemental appropriation.

COOPERATIVE LAW ENFORCEMENT

Mr. **Yates**. The GAO recently specified the growth of illegal and unauthorized activities on public lands. Have you responded to that report?

Mr. **Miles**. We are preparing our response now.

Mr. **Yates**. Do you agree with its assessment?

Mr. **Miles**. They seem not to recognize the role of the States and local communities on National Forest System lands. The biggest problem of the report was an indication that we had more of a law enforcement responsibility on those lands than we really do. We have only proprietary jurisdiction of those lands. Basic law enforcement has to be carried out by State and local communities.

Mr. **Yates**. Do the State and local communities accept that kind of enforcement?

Mr. **Miles**. Yes. In this line item we have the authority to cooperate with them and give grants to State and local communities to augment their police work so that when we have high use areas like recreation areas we can enter into an agreement with that local jurisdiction. They will augment their police force to help handle the additional problems.

Mr. **Yates**. What is the rate of increase on criminal activity?

Mr. **Miles**. I don't have that figure. We can supply that. We don't have the figures that relate directly to national forests, but we do have it for rural areas which we think would be consistent.

[The information follows:]

Increase in Criminal Activity

During the period 1977 through 1981, the reported rate of crime directed at visitors and their property on the national forests increased by 145 percent. The more serious crimes increase at a more rapid rate than less serious crimes during this period. In 1981, a crime directed at a national forest visitor or their property occurred for every 2,750 visitor days or recreation use. These crimes were reported by the States and local jurisdictions, since they have responsibility for law enforcement protection of national forests visitors and their property. Federal Bureau of Investigation's statistics for all rural areas of the United States show an overall increase of 23 percent during the same period. Their statistics also demonstrate a more rapid rate of increase in violent crime as compared with crimes directed at property.

Mr. **Yates**. Is there enough money in the budget to deal with this problem?

Mr. **Miles**. We are asking for an increase so that we can add some of these poorer local jurisdictions to our grantee list.

Mr. **Yates**. Why do you have to increase the staffing for the program?

Mr. **Miles**. The staffing would be consistent. I am not sure, Mr. Chairman. Could I respond to that?

Mr. **Yates**. Sure.

[The information follows:]

Increased Staffing for Cooperative Law Enforcement

The increase in staffing proposed for the Cooperative Law Enforcement is needed to develop and administer the cooperative law enforcement agreements. Reimbursement is made to local jurisdictions for extraordinary services. The 1983 President's Budget provides for an increase of $718,000 over 1982. This additional emphasis to protect the forest visitor would require a modest increase of 7 staff years to administer the proposed increase.

FOREST TRAIL MAINTENANCE

Mr. **Yates**. Well, you are decreasing forest trail maintenance by $3.4 million, and you say 30,000 less miles of trial will be maintained. Can you estimate the loss of capital investment that would result from this decrease?

Mr. **Peterson**. No, not on a 1-year basis, you couldn't do that.

Mr. **Yates**. Well, do we have to wait then? You can't tell us anything. It is to be expected, though, isn't it?

Mr. **Peterson**. It would take several years of less maintenance to significantly decrease the investment.

Mr. **Yates**. What is the impact on soil and water resources likely to be?

Mr. **Peterson**. I don't think we can quantify that either because we try to concentrate the maintenance dollars that we have left on those trails that had serious erosion or other problems of that nature. There would be some possible increase.

Mr. **Yates**. In 1981 you estimated that volunteers would be able to maintain 3,495 miles of trail. In 1983 you expect the volunteers to take care of 10,000 miles of trail. How do you arrive at that enormous increase?

Mr. **Peterson**. That is based on the actual trend and the interest that we have had in the volunteer program. We have established, for example, in the California region an "800" telephone number so people can call and volunteer for 3 weeks, 6 weeks, 2 months for a variety of activities. And we have gotten quite a bit of response.

Mr. **Yates**. Will you be able to train them in view of the fact that you are losing personnel for this activity?

Mr. **Peterson**. Our intention is to use the funding that we have to provide for training of our people so they can, in turn, provide adequate training to the volunteers and adequate supervision.

TIMBER SALES IN OREGON

Mr. **Yates**. How much is included in timber sales administration and management for the Oregon lands? Do you want to put that in the record?

[The information follows:]

OREGON AND CALIFORNIA GRANT LANDS

There is $2,950,000 in the 1983 Bureau of Land Management budget earmarked as the Forest Service share for managing the O&C Grant lands. This is below the estimated share of 25 percent of the receipts from the income on these lands. The Bureau of Land Management and the Forest Service have been working toward an equitable share of funding for the Forest Service in future years.

Mr. YATES. Why shouldn't the total FS cost for management of the O&C lands be reimbursed?

Mr. PETERSON. We have talked to the Bureau of Land Management about this, and we are moving in that direction.

Mr. YATES. Slowly or quickly?

Mr. PETERSON. We have made some progress.

Mr. YATES. Does that mean slowly or quickly?

Mr. PETERSON. No; reasonable progress I think, because you can't shift overnight.

Mr. YATES. Have you made any studies which would indicate whether the amount of O&C payments made by the Federal Government to Oregon and California is comparable to the amount of taxes paid on lands by private owners?

Mr. PETERSON. There was a study made by the Council on Intergovernmental Relations, I believe, and that study is available and is published. It does compare different kinds of payments.

Mr. YATES. Is that available?

Mr. PETERSON. Yes, sir.

Mr. YATES. Would you make a copy available to the committee?

Mr. PETERSON. Yes, sir, we will.

[COMMITTEE NOTE.—Subsequent to the hearing, a copy of the study, The O&C Lands, was provided to the Committee. It will be available in the Committee files.]

TIMBER SALES PREPARATION AND HARVEST

Mr. YATES. Sales Preparation and Harvest Administration is increased by $18.5 million. What is the reason for preparing a total of 845 million board feet, which is broken down by 300 in 1981 and 545 in 1982, which will be held in reserve? When do you plan to offer this timber?

Mr. PETERSON. At a time when the market starts moving upward and when the volume would be an important contribution to the market. Some will be offered in 1983.

Mr. YATES. Are costs to offer the remaining volume included in your 1983 request?

Mr. PETERSON. No, sir. It is what we refer to as shelf volume and we would offer it at some future time.

[COMMITTEE NOTE.—Subsequent to the hearing, the committee was informed that the total "shelf volume" is 950 million board feet rather than 845 million board feet. 450 million board feet is scheduled to be offered in fiscal 1983 and the costs to offer it are included in the 1983 request. The costs to offer the remaining 500 million board feet will be included in the budget for the fiscal year in which the volume is scheduled to be offered.]

Mr. YATES. You have a fee program for the fuelwood that you previously gave away free, and the cost to administer the program is $5.3 million. The estimated receipts are $10 million. Twenty-five percent of the receipts will be returned to State and local governments. Why is that?

Mr. PETERSON. That is based on a law that provides that 25 percent of receipts from all purposes from the National Forest Fund goes to the counties.

Mr. YATES. What happens to the balance of the receipts?

Mr. PETERSON. They stay in the United States Treasury.

Mr. YATES. Well, should they be appropriated directly to cover the cost of the program?

Mr. PETERSON. Traditionally there has been concern with that type of indirect financing.

Mr. YATES. I know.

Mr. PETERSON. We have a procedure to do that under the salvage requirement. We generally don't have that authority.

Mr. Chairman, I might mention that about a month ago we delayed expanding the charge programs for fuel because of the difficulty in a lot of places where people are unemployed. They cut fuel wood, and we didn't figure it was a time to start charging since it was the only way they could avoid high fuel costs. We have delayed implementation of that charge program.

NURSERY AND TREE IMPROVEMENT OPERATIONS

Mr. YATES. Nursery and tree improvement operations have increased by $500,000. What level of production of seedlings will this request allow? Put that in the record and compare it to 1981 and 1982, would you?

Mr. PETERSON. Yes, sir.

[The information follows:]

NURSERY AND TREE IMPROVEMENT

The $500,000 increase in fiscal year 1983 Nursery and Tree Improvement Operations will primarily provide for tree improvement work. Seedling production will not change much from 1982.

	Million seedlings
Fiscal year 1981	170
Fiscal year 1982	166
Fiscal year 1983	173

Mr. YATES. How many seedlings were destroyed last year?

Mr. PETERSON. We think it will turn out to be somewhere between 5 million and 8 million trees, which is less than 5 percent.

Mr. YATES. Why did you destroy them?

Mr. PETERSON. Because when we put the trees in the nursery, some as long as 2 years ago, we did not anticipate a great reduction in harvest rates. In many places the sites are simply not available and there is no point in putting the trees in areas where they are not designed to be grown.

Mr. YATES. Have you taken into consideration the impact of your extensions in calculating your reforestation and seedling production for 1983?

Mr. PETERSON. Yes, we have.

INCREASE IN RECREATION DEMAND

Mr. YATES. Will you put in the record the increases you have been experiencing in recreation demand?

Mr. PETERSON. Yes, sir.

[The information follows:]

INCREASES IN RECREATION DEMAND

Recreation demand expressed as Recreation Visitor Days, has increased at an annual rate of slightly more than 3 percent for the period 1976 through 1981. From 1980 to 1981 the increase was 1.3 percent. This change was primarily due to reduced discretionary travel caused by rapidly rising gasoline prices.

Mr. YATES. Is your budget sufficient to take care of that increase?

Mr. PETERSON. The budget is an actual increase in 1983.

Mr. YATES. I know. Is it adequate?

Mr. PETERSON. I think it will allow us to do a reasonable job. We will, in some cases, reduce the length of season for some of the campgrounds. We have already closed some campgrounds with serious health and safety problems, but this will allow us generally to keep the level of recreation.

REHABILITATION PROJECTS

Mr. YATES. But you are not asking for any money to reduce the backlog of $100 million for rehabilitation?

Mr. PETERSON. That is true.

Mr. YATES. What happens as a result of that?

Mr. PETERSON. We are deferring that job until some later time.

Mr. YATES. Does that increase the health and safety hazards at your recreation facilities?

Mr. PETERSON. It could at some sites, in which case we would have to repair or close the site.

Mr. YATES. Do you have enough money to repair it?

Mr. PETERSON. I can't be sure that in every case we would because some can be very costly and some can be very simple.

Mr. YATES. Did you cut back on recreation construction until the rehabilitation needs are met?

Mr. PETERSON. Mr. Chairman, it is hard to look at one individual item in this budget. If we had an unlimited pot of money——

Mr. YATES. Which we have usually had in the past?

Mr. PETERSON. No, obviously not.

If we had an unlimited amount of money there are all kinds of desirable things that we can do. We are trying to somehow reduce the deficit and reduce the size of the budgets which requires a number of priority decisions to be made. I would not increase this item in the budget and decrease some other ones.

Mr. YATES. Why are you increasing contractual services for $3.1 million?

Mr. PETERSON. We do a substantial amount of our garbage collection and other operation and maintenance by contract.

INCREASED RECREATION FEES

Mr. YATES. Are you increasing recreation fees?

Mr. PETERSON. Yes, in some places we are. Generally, Mr. Housley could respond more fully, but we charge them about $2 a night for campgrounds up to $6 or $7 depending on the location and facilities.

Mr. YATES. Will those cover the expenses for those facilities?

Mr. PETERSON. In some cases they will and in some cases they will not. We are, in a few places, asking private concessionaires to operate the campgrounds for us.

Mr. YATES. Is this the first time?

Mr. PETERSON. No. Twenty or 25 years ago we did some of this, because fees were so low. It was like 50 cents a night per camper, and it was not an economic venture. Now that fees on public campgrounds as well as State campgrounds have increased some, it appears in a few locations we have got an economic venture.

Mr. YATES. What are the costs of that?

Mr. PETERSON. In the contracts that we are talking about, the concessionaire would do all of the ordinary maintenance, care, policing, and so on, in return for collecting the fees that are involved. So there would be no out-of-pocket cost to the Government for that operation.

Mr. HOUSLEY. There are some net receipts in several cases.

Mr. PETERSON. We are doing that really on a trial basis in about three regions now.

Mr. HOUSLEY. About six sites. This will be the first year of the test.

Mr. YATES. So we don't know how it will work out yet?

Mr. PETERSON. No, sir. We think these sites have been selected pretty carefully and they hold promise of working okay.

COSTS OF SERVICING RECREATION VISITORS

Mr. YATES. What are your costs for servicing the recreation visitors?

Mr. PETERSON. It is about 52 cents per day.

Mr. YATES. How does that compare with the Park Service?

Mr. PETERSON. I don't know if you can compare them directly, because with skiing, for example, we have a private concession. If you just look at raw numbers, their costs would be about $4.50 per visitor day.

SCHEDULE FOR COMPLETING WILDERNESS RECREATION

Mr. YATES. What is your schedule for completing wilderness recreation?

Mr. PETERSON. The only ones that we have remaining are part of further forest land management and a few congressionally designated study areas. The study areas generally have a 5- to 7-year period to run. We can give you specifics if you are interested.

Mr. YATES. Yes, put that in the record.

[The information follows:]

Wilderness Area Planning

Further planning areas, identified in RARE II, are being considered in the forest land and resources management planning process. These forest plans are scheduled for completion by early 1984. Congressionally designated Wilderness Study Areas carry various completion dates. It is our intent to consider these areas in a similar manner and schedule as further planning areas. Through this process, we expect to complete 98 percent or more of the studies by the 1984 date.

Approximately 12 million acres of National Forest System land require additional planning prior to the Administration submitting final recommendations to Congress for Congressionally designated Wilderness Study areas and those Further Planning Areas which may be recommended to the Congress for consideration for additions to the National Wilderness Preservation System.

We are submitting an inventory list entitled "Further Planning Areas," dated August 1981. The inventory includes all further Planning Areas, and Congressional Study Areas, and are indentified by the letters CSA following the individual area name.

Further Planning Areas

(by States)

August 1981

FURTHER PLANNING

STATE	FOREST NAME	AREA CODE	AREA NAME	AREA GROSS	AREA NET
AL	NF IN ALABAMA	08057	SHINBONE CREEK	3213	2588
AL	NF IN ALABAMA	08205	THOMPSON CREEK	7774	7524
AL	NF IN ALABAMA	08207	HAGOOD CREEK	3700	3700
AL	NF IN ALABAMA	08209	MONTGOMERY-BORDEN CREEK	7411	7061
AL	NF IN ALABAMA	08210	BRUSHY FORK	4055	3961
AL	NF IN ALABAMA	08211	RABBITTOWN CONTIG.	545	545
AL	NF IN ALABAMA	08215	ADAMS GAP	6257	5720
AL	NF IN ALABAMA	08214	BIG SANDY	3190	2579
AL	NF IN ALABAMA	08213	WEST ELLIOTS CREEK	4237	3264
AK	CHUGACH	C4004	A-KENAI LAKE	149500	149500
AK	CHUGACH	C8004	B-KENAI LAKE	52000	52000
AK	CHUGACH	C4005	A-E KENAI MTNS.	221500	221500
AK	CHUGACH	C0002	BOSTON BAR	52000	52000
AK	CHUGACH	C0003	JOHNSON PASS	147500	147500
AK	CHUGACH	C0005	TWENTYMILE	171000	171000
AK	CHUGACH	C0010	COLUMBIA GLACIER	17000	17000
AK	CHUGACH	C0011	NELLIE JUAN-COLLEGE FIORD CSA	2222035	2222035
AK	CHUGACH	C0013	MONTAGUE IS.	204500	204500
AK	CHUGACH	C0014	FIDALGU/GRAVINA	328000	328000
AK	CHUGACH	C0015	HINCHENBROOK-HAWKINS	145000	145000
AK	CHUGACH	C0016	SHERIDAN GLACIER	171900	171900
AK	CHUGACH	C0017	COPPER RIVER WETLANDS	69300	69300
AK	CHUGACH	C0018	BERING LAKE	539100	539100
AZ	APACHE-SITGRAVES	03138	HELL HOLE	15470	15470
AZ	COCONINO	03048	STRAWBERRY CRATER SOUTH	8050	8050
AZ	COCONINO	03047	WEST CLEAR CREEK	33650	31850
AZ	COCONINO	03046	FOSSIL SPRINGS	14090	14090
AZ	COCONINO	03045	WET BEAVER	9590	9590
AZ	COCONINO	03054	RATTLESNAKE	32870	32870
AZ	COCONINO	03059	STRAWBERRY CRATER NORTH	1790	1790
AZ	CORONADO	03201	DRAGOON MTNS	33140	32820
AZ	CORONADO	03901	GALIURO	61590	61590
AZ	CORONADO	03110 *	WHITMIRE CANYON	5080	5080
AZ	CORONADO	03122	WINCHESTER	14100	14100
AZ	CORONADO	03112	NORTH END	23550	23550
AZ	CORONADO	03120	WHETSTONE	36510	36510
AZ	CORONADO	03200 *	BUNK ROBINSON	740	740
AZ	KAIBAB	B3050 *	KANAB CREEK	9168	9008
AZ	PRESCOTT	03092 *	ARNOLD MESA	28000	28000

* Indicates another part of the area is located in an adjacent unit or units.

STATE	FOREST NAME	AREA CODE	AREA NAME	AREA GROSS	AREA NET
AZ	TONTO	03015 *	MAZATZAL WLD CONTIG	83750	83700
AZ	TONTO	03021	HELLS GATE	30400	30400
AZ	TONTO	03019 *	SUPERSTITION WLD CONTIG	32160	32160
AZ	TONTO	03092 *	ARNOLD MESA	320	320
AR	OUACHITA	08099 *	BELLE STARR WEST	5550	5400
AR	OUACHITA	08093 *	BELLE STARR CSA	6035	5970
AR	OUACHITA	08004	LITTLE BLAKELY	5140	2725
AR	OUACHITA	08057	DRY CREEK CSA	6479	6370
AR	OUACHITA	08088 *	BELLE STARR CAVE	5900	5550
AR	OZARK-ST.FRANCIS	08077 *	RICHLAND CREEK CSA	2100	2100
AR	OZARK-ST.FRANCIS	08001 *	RICHLAND CREEK	10143	10076
CA	ANGELES	F5009	PLEASANT VIEW	21000	21000
CA	ANGELES	05002 *	SESPE-FRAZIER	15200	15000
CA	ANGELES	05012	ARROYO SECO	5000	5000
CA	ANGELES	L5307 *	SHEEP MTN. CSA	29700	29100
CA	CLEVELAND	05304	SILL HILL	5200	5200
CA	CLEVELAND	05021	HAUSER	8000	7500
CA	CLEVELAND	05017	CALIENTE	5900	5900
CA	ELDORADO	05995 *	RAYMOND PEAK	14500	12500
CA	ELDORADO	05027	CAPLES CREEK	17900	17300
CA	ELDORADO	05023 *	PYRAMID	24300	25500
CA	ELDORADO	05994 *	TRAGEDY-ELEPHANTS BACK	28500	27700
CA	ELDORADO	05026	RUBICON	5100	5100
CA	ELDORADO	05992 *	DARDANELLES	8000	8000
CA	INYO	F5058	WHITE MTNS	159800	159800
CA	INYO	F5047	SAN JOAQUIN	1500	1500
CA	INYO	05033	COYOTE - SOUTHEAST	53800	51700
CA	INYO	05035	TABLE MTN	4500	4400
CA	INYO	A5064	MAZOURKA	82200	82200
CA	INYO	05040	WHEELER RIDGE	15300	15200
CA	INYO	05049	HORSE MDW	5700	5100
CA	INYO	05050	TIOGA LAKE	800	800
CA	INYO	05051	HALL NATURAL AREA	5700	5500
CA	INYO	05052	LOG CABIN SADDLEBAG	14700	14700
CA	INYO	05055	BENTON RANGE	11400	11200
CA	INYO	05059	BLANCO MTN	17400	17300
CA	INYO	05060	BIRCH CREEK	28500	27100
CA	INYO	05061	BLACK CANYON	30700	30700
CA	INYO	05063	ANDREWS MTN	11800	11800
CA	INYO	B5064	PAIUTE	55900	55900
CA	INYO	05045	LAUREL - MCGEE	5700	5700
CA	INYO	05039	BUTTERMILK	1000	900

STATE	FOREST NAME	AREA CODE	AREA NAME	AREA GROSS	AREA NET
CA	KLAMATH	05704	CONDREY MTN	40452	39312
CA	KLAMATH	B5079 *	ORLEANS MTN	55240	54090
CA	LAKE TAHOE BASIN M.U.	05982 *	DARDANELLES	14500	14500
CA	LAKE TAHOE BASIN M.U.	05271	FREEL	15500	15600
CA	LAKE TAHOE BASIN M.U.	05023 *	PYRAMID	8400	7900
CA	LASSEN	05093	WILD CATTLE MTN	5100	4900
CA	LASSEN	05097	POLK SPRINGS	9400	9400
CA	LASSEN	05254	MILL CREEK	9800	7700
CA	LASSEN	05099 *	CHIPS CREEK	31100	29500
CA	LASSEN	05100	BUTT MTN	8500	8600
CA	LASSEN	B5095	TRAIL LAKE	1100	1100
CA	LASSEN	05098	LOST CREEK	8300	8300
CA	LASSEN	05096	HEART LAKE	9900	9900
CA	LASSEN	B5098	ISHI	25700	21200
CA	LOS PADRES	05002 *	SESPE-FRAZIER	320700	315200
CA	LOS PADRES	05102	BLACK BUTE	20500	19500
CA	LOS PADRES	05103	BEAR MOUNTAIN	21400	20900
CA	LOS PADRES	05104	BEAR CANYON	12500	12600
CA	LOS PADRES	05107	GARCIA MOUNTAIN	25200	23500
CA	LOS PADRES	05108	BLACK MOUNTAIN	15300	15200
CA	LOS PADRES	05117	LA BREA	61100	51000
CA	LOS PADRES	05118	SPOOR CANYON	12300	12300
CA	LOS PADRES	05110	MACHESNA MOUNTAIN	31700	31300
CA	LOS PADRES	05120	FOX MOUNTAIN	51300	51200
CA	LOS PADRES	05112	BIG ROCKS	11900	11200
CA	LOS PADRES	05127	DIABLO	19200	19200
CA	LOS PADRES	05115	HORSESHOE SPRINGS	13300	13300
CA	LOS PADRES	05109	LA PANZA	5500	5300
CA	LOS PADRES	05111	LOS MACHOS HILLS	11700	11100
CA	LOS PADRES	05113	STANLEY MOUNTAIN	15900	14900
CA	LOS PADRES	05114	MIRANDA PINE	12800	12500
CA	LOS PADRES	05129	MATILIJA	32000	31400
CA	LOS PADRES	05131	DRY LAKES	15500	15500
CA	LOS PADRES	05134	SAWMILL-BADLANDS	90000	86500
CA	LOS PADRES	05135	CUYAMA	19000	19000
CA	LOS PADRES	05116	TEPUSQUET PEAK	5400	5300
CA	LOS PADRES	05136	ANTIMONY	39500	37000
CA	LOS PADRES	05278	LITTLE PINE	1000	1000
CA	LOS PADRES	05258	QUATAL	6900	6900
CA	MENDOCINO	05259	BLACK BUTTE	17800	15200
CA	MENDOCINO	05137	WILDERNESS CONTIGUOUS	10700	10700
CA	MENDOCINO	05140	ELK CREEK	18900	17400
CA	MENDOCINO	05145 *	BIG BUTTE-SHINBONE	22900	21000

STATE	FOREST NAME	AREA CODE	AREA NAME	AREA GROSS	AREA NET
CA	PLUMAS	05157	MIDDLE FORK	29300	28100
CA	PLUMAS	05158	BUCKS LAKE	19400	19400
CA	PLUMAS	05172 *	WEST YUBA	6000	6000
CA	PLUMAS	05159	BALD ROCK	3550	3550
CA	PLUMAS	05099 *	CHIPS CREEK	13900	13900
CA	ROGUE RIVER	05704	CONDREY MOUNTAIN	11215	10115
CA	SAN BERNARDINO	05155	SUGARLOAF	8900	8900
CA	SAN BERNARDINO	B5157	RAYWOOD FLT	18500	11500
CA	SAN BERNARDINO	A5188	CACTUS SPRG	19200	12800
CA	SAN BERNARDINO	B5174	CUCAMONGA B	14900	14700
CA	SAN BERNARDINO	C5174	CUCAMONGA C	4000	4000
CA	SEQUOIA	05199	AGNEW	18200	18200
CA	SEQUOIA	05197	OAT MTN	12400	12400
CA	SEQUOIA	05202	DENNISON PEAK	5700	5700
CA	SEQUOIA	05203	MOSES	24359	24359
CA	SEQUOIA	05212	SCODIES	48000	48000
CA	SEQUOIA	05205	WOODPECKER	44400	44300
CA	SEQUOIA	B5198 *	KINGS RIVER	24300	23900
CA	SEQUOIA	05207	DOMELAND	3100	3100
CA	SEQUOIA	A5213	CYPRESS	1949	1949
CA	SHASTA TRINITY	05225	EAST FORK	5200	5200
CA	SHASTA TRINITY	05229	MT. EDDY	9500	7200
CA	SHASTA TRINITY	05220	CHANCHELULLA	11900	11800
CA	SHASTA TRINITY	C5231	MT SHASTA C	299	1
CA	SHASTA TRINITY	05806	GRANITE PEAK	3200	3200
CA	SHASTA TRINITY	A5299	FISHERGULCH	3300	3300
CA	SHASTA TRINITY	05807	LAKE ELEANOR	14300	11500
CA	SHASTA TRINITY	B5219	CASTLECRAGB	3300	3300
CA	SHASTA TRINITY	05804	WEAVER BALLY	14200	12500
CA	SHASTA TRINITY	05298	MURPHY GLADE	900	900
CA	SHASTA TRINITY	F5079 *	ORLEANS MTN	60440	44140
CA	SIERRA	05242	MOUNT RAYMOND	6950	6950
CA	SIERRA	05244	DINKEY LAKES	115110	114510
CA	SIERRA	B5198 *	KINGS RIVER	24358	24258
CA	SIERRA	C5298	RANCHERIA	13780	13090
CA	SIX RIVERS	05707	NORTH FORK SMITH	35577	35277
CA	SIX RIVERS	B5079 *	ORLEANS MTN	17250	17250
CA	SIX RIVERS	05145 *	BIG BUTTE-SHINBONE	12105	12105
CA	STANISLAUS	B5985	CARSON ICEBERG	23800	23040
CA	STANISLAUS	05258	TUOLOMNE RIVER	17600	17200
CA	STANISLAUS	05985 *	RAYMOND PEAK	17000	16800

STATE	FOREST NAME	AREA CODE	AREA NAME	AREA GROSS	AREA NET
CA	TAHOE	05252	NORTH FORK AMERICAN	49100	33900
CA	TAHOE	05254	EAST YUBA	17900	17500
CA	TAHOE	A5251	GRANITE CHIEF	35200	23400
CA	TAHOE	05172 *	WEST YUBA	14900	14900
CA	TOIYABE	04952 *	DARDENELLES	2480	2410
CA	TOIYABE	04954 *	TRAGEDY-ELEPHANTS BACK	1280	1280
CA	TOIYABE	04955 *	RAYMOND PEAK	38350	37270
CA	TOIYABE	04557 *	SWEETWATER	59980	58510
CA	TOIYABE	E4552 *	HOOVER	55241	42600
CO	GD MESA-UMP GUNN	B2181	OH-BE-JOYFUL	5500	5450
CO	GD MESA-UMP.GUNN	02204	FOSSIL RIDGE (PART.) CSA	54700	54700
CO	GD MESA-UMP.GUNN	02218	CANNIBAL PLATEAU	31990	31990
CO	RIO GRANDE	02278	WHEELER GEOLOGIC (PT.) CSA	11390	11390
CO	RIO GRANDE	02256 *	SANGRE DE CRISTO CSA	131332	130572
CO	ARAPAHO-ROOS.	E2351	VASQUEZ PEAK CSA	12900	12800
CO	ARAPAHO-ROOS.	02114	WILLIAMS FORK AH	74820	74770
CO	ROUTT	A2104	SERVICE CREEK	39940	39850
CO	ROUTT	C2100	DAVIS PEAK (PART.)	8100	8100
CO	ROUTT	E2351	ST. LOUIS PK.	12800	12800
CO	SAN ISABEL & PIKE	A2250	BUFFALO PEAKS CSA	55950	55950
CO	SAN ISABEL & PIKE	A2252	LOST CREEK (PARTIAL)	23000	23000
CO	SAN ISABEL & PIKE	A2270	GREENHORN MTN. CSA	22490	22330
CO	SAN ISABEL & PIKE	A2271	SPANISH PEAKS CSA	20440	19570
CO	SAN ISABEL & PIKE	02265 *	SANGRE DE CRISTO CSA	87300	87300
CO	SAN JUAN	A2292	PIEDRA CSA	41500	41500
CO	SAN JUAN	02284	SOUTH SAN JUAN CSA	32800	32800
CO	SAN JUAN	A2303	WEST NEEDLE CSA	15800	15800
CO	WHITE RIVER	A2177	HUNTER-FRYINGPAN ADD CSA	8000	8000
FL	NF IN FLORIDA	08009	SAVANNAH	1945	1944
FL	NF IN FLORIDA	08305	FARLES PRAIRIE	2175	2175
FL	NF IN FLORIDA	08305	BUCK LAKE	5580	5580
FL	NF IN FLORIDA	08106	CLEAR LAKE	6485	6485
FL	NF IN FLORIDA	08108	NATURAL AREA	4380	4380
GA	CHATTAHOOCHEE-OCONEE	08025 *	OVERFLOW	4600	4600
GA	CHATTAHOOCHEE-OCONEE	08027	BLOOD MOUNTAIN	10275	10245
GA	CHATTAHOOCHEE-OCONEE	08141	HEMP TOP	2800	2800
GA	CHATTAHOOCHEE-OCONEE	08143	RICH MOUNTAIN	16880	15280
GA	CHATTAHOOCHEE-OCONEE	08029	CHATTAHOOCHEE RIVER	23050	22900
GA	CHATTAHOOCHEE-OCONEE	08030	TRAY MOUNTAIN	35300	35300

STATE	FOREST NAME	AREA CODE	AREA NAME	AREA GROSS	AREA NET
ID	BOISE	W4051	TEN MILE WEST	85424	85424
ID	IDAHO PANHANDLE	B1125 *	SELKIRKS	20792	19205
ID	IDAHO PANHANDLE	C1125 *	SELKIRKS	9319	9154
ID	IDAHO PANHANDLE	D1125 *	SELKIRKS	16978	15934
				45090	44295
ID	CARIBOU	04753 *	MT. NAOMI	25540	25500
ID	CHALLIS	04551 *	WHITE CLOUD BOULDER	39700	39700
ID	SAWTOOTH	04551 *	WHITE CLOUD BOULDER CSA	242535	242245
ID	TARGHEE	M4945	ITALIAN PEAK MIDDLE	42500	42500
ID	TARGHEE	W4513 *	PALISADES (WEST)	111250	111250
ID	TARGHEE	W4952	MT. JEFFERSON WEST	5700	5655
ID	NEZPERCE	01953	BIG CANYON A	15500	15500
ID	NEZPERCE	01954	KLOPTON CREEK-CORRAL CR.	24300	23520
IL	SHAWNEE	09103	BURDEN FALLS	3555	2999
IL	SHAWNEE	09105	LUSK CREEK	5737	5903
KY	DANIEL BOONE N.F.	08035	TROUBLESOME	2943	2943
MS	NF IN MISSISSIPPI	08310	SANDY CREEK	2375	2375
MO	MARK TWAIN	09015	PADDY CREEK CSA	5895	5725
MO	MARK TWAIN	09221	IRISHWILDERNESS	17562	17322
MT	BEAVERHEAD	B1013 *	MIDDLE MTN - TOBACCO ROOTS	2000	2000
MT	BEAVERHEAD	I1945 *	ITALIAN PEAK	12995	12995
MT	BEAVERHEAD	J1549 *	TAYLOR-HILGARD CSA	40174	29525
MT	BEAVERHEAD	M1549 *	TAYLOR-HILGARD CSA	74552	47417
MT	BEAVERHEAD	S1549 *	TAYLOR-HILGARD SOUTH CSA	42959	42959
MT	BEAVERHEAD	01005	WEST PIONEER CSA	149150	147992
MT	BEAVERHEAD	01952 *	MT. JEFFERSON	4500	4500
MT	BITTERROOT	A1941	BLUE JOINT MTN. CSA	51400	51400
MT	BITTERROOT	01421 *	SAPPHIRE	42600	42300
MT	DEERLODGE	A1520 *	ELKHORN CSA	11200	11150
MT	DEERLODGE	B1013 *	MIDDLE MTN - TOBACCO ROOTS	35100	34540
MT	DEERLODGE	01421 *	SAPPHIRES	55715	55515
MT	DEERLODGE	01425	FLINT RANGE	52340	52220
MT	DEERLODGE	01429	DOLUS LAKE	9100	9100

STATE	FOREST NAME	AREA CODE	AREA NAME	AREA GROSS	AREA NET
MT	GALLATIN	E1549 *	TAYLOR-HILGARD CSA	106400	105750
MT	GALLATIN	G1549	GALLATIN DIVIDE CSA	128732	81592
MT	GALLATIN	H1548	HYALITE CSA	22259	22259
MT	GALLATIN	N1549 *	TAYLOR-HILGARD CSA	49000	32540
MT	GALLATIN	R1549 *	TAYLOR-HILGARD CSA	41120	32540
MT	GALLATIN	S1549 *	TAYLOR-HILGARD CSA	34500	34500
MT	HELENA	A1520 *	ELKHORN CSA	49500	49500
MT	HELENA	E1520 *	ELKHORN CSA	25000	25000
MT	KOOTENAI	01555	MT. HENRY CSA	21000	21000
MT	KOOTENAI	01583	TEN LAKES CSA	34000	34000
MT	LEWIS & CLARK	A1739 *	BIG SNOWIES CSA	6290	6290
MT	LEWIS & CLARK	B1739 *	BIG SNOWIES CSA	5350	5350
MT	LEWIS & CLARK	H1495 *	DEEP CREEK	1520	1520
MT	LEWIS * CLARK	P1495 *	DEEP CREEK	25059	25059
MT	LEWIS & CLARK	S1739 *	BIG SNOWIES CSA	110050	109950
MT	LEWIS & CLARK	01734	MIDDLE FORK JUDITH CSA	92200	91000
NC	NF IN NO.CAROLINA	08193 *	CRAGGY MTN CSA	1100	1100
NC	NF IN NO.CAROLINA	08061	SNOWBIRD	5490	5490
NC	NF IN NO.CAROLINA	L8314	LOST COVE	5709	5709
NC	NF IN NO.CAROLINA	08056 *	CRAGGY MTN	1280	1195
NC	NF IN NO.CAROLINA	L8315	HARPER CREEK	7163	7139
NC	NFS IN NORTH CAROLINA	08025 *	OVERFLOW	3200	3200
NH	WHITE MOUNTAIN	09075	MT WOLF-GORDON POND	12379	11179
NH	WHITE MOUNTAIN	09074	DARTMOUTH RANGE	10142	10142
NH	WHITE MOUNTAIN	A9054	WILD RIVER	27000	27000
NH	WHITE MOUNTAIN	09056	PEMIGEWASSET	75510	75510
NH	WHITE MOUNTAIN	A9052	CARR MOUNTAIN	9000	9000
NH	WHITE MOUNTAIN	09072	KINSMAN MOUNTAIN	8420	8420
NH	WHITE MOUNTAIN	09076	JOBILDUNK	4920	4920
NM	LINCOLN	03077	GUADALUPE ESCARPMENT CSA	21300	21000
NM	CARSON	B3032	COLUMBINE HONDO CSA	46050	45000
NM	CORONADO	03110 *	WHITMIRE CANYON CSA	7660	7660
NM	CORONADO	03200 *	BUNK ROBINSON CSA	15110	15110
NM	GILA	03135	HELL HOLE CSA	18950	18950
NM	GILA	03139 *	LOWER SAN FRANCISCO CSA	8800	8800
NV	HUMBOLDT	04352	MT MORIAH	97205	97205
NV	HUMBOLDT	04359	WHEELER PEAK	51919	61959
NV	HUMBOLDT	04391	HIGHLAND RIDGE	75017	76017
NV	INYO	05296	SUGARLOAF	11200	11100
NV	INYO	F5058 *	BOUNDARY PEAK	27500	26500

STATE	FOREST NAME	AREA CODE	AREA NAME	AREA GROSS	AREA NET
NV	LAKE TAHOE BASIN M.U.	05953	LINCOLN CREEK	6600	6400
NV	TOIYABE	04557 *	SWEETWATER	12260	12250
O	DESCHUTES	B5132 *	WINDIGO THIELSEN	15500	15500
O	MALHEUR	05249	PINE CREEK	5400	5400
O	MT.HOOD	06099	OLALLIE	9573	8573
O	OCHOCO	06321	DESCHUTES CANYON	17452	9955
O	SISKIYOU	05707	NORTH FORK SMITH	950	950
O	UMATILLA	B6253 *	NORTH FORK JOHN DAY	20653	20653
O	UMPQUA	B5132 *	WINDIGO THIELSEN	32423	32423
O	WALLOWA-WHITMAN	06502	SHEEP DIVIDE	7100	7100
O	WALLOWA-WHITMAN	05295	LORDS FLAT-SOMERS POINT CSA	75900	74700
O	WALLOWA-WHITMAN	05293	WESTSIDE RESERVOIR FACE CSA	14900	14740
O	WALLOWA-WHITMAN	05285	LICK CREEK	5990	5990
O	WALLOWA-WHITMAN	05299	COOK RIDGE	20050	20050
O	WALLOWA-WHITMAN	05296	SNAKE RIVER	33595	33515
O	WALLOWA-WHITMAN	05297	BUCKHORN	20230	16315
O	WALLOWA-WHITMAN	05300	WILDHORSE	20500	20500
O	WALLOWA-WHITMAN	05291	HOMESTEAD	6340	6250
O	WALLOWA-WHITMAN	05298	MOUNTAIN SHEEP CSA	14700	9500
O	WALLOWA-WHITMAN	05290	LAKE FORK	20555	20555
O	WALLOWA-WHITMAN	05294	IMNAHA FACE	29920	29710
O	WALLOWA-WHITMAN	05292	MCGRAW CREEK	5190	5900
O	WALLOWA-WHITMAN	B5253 *	NORTH FORK JOHN DAY	547	547
PA	ALLEGHENY	09031	CORNPLANTER	3012	3012
PA	ALLEGHENY	09020	HICKORY CREEK	9427	9337
PA	ALLEGHENY	09019	ALLEGHENY FRONT	9595	7424
PA	ALLEGHENY	09022	CLARION RIVER	4042	3440
SC	FRANCIS MARION SUMPTER	08112 *	ELLICOTT ROCK	5733	5512
SC	FRANCIS MARION SUMPTER	L8115	PERSIMMON MTN.	7149	6575
TN	CHEROKEE	08275	UNAKA MOUNTAIN	4700	4700
TN	CHEROKEE	08037 *	BIG FROG	547	547
TN	CHEROKEE	08035 *	POND MOUNTAIN	4365	4365
TN	CHEROKEE	08032	ROGERS RIDGE	6721	5941
TN	CHEROKEE	08273 *	POND MOUNTAIN	2300	2300
TN	CHEROKEE	08151	CITICO CREEK CSA	16575	16575
TN	CHEROKEE	08277	LITTLE FROG MOUNTAIN	4900	4900
TN	CHEROKEE	08152 *	BIG FROG CSA	4625	4525
TN	CHEROKEE	08176	FLINT MILL	7183	7165

STATE	FOREST NAME	AREA CODE	AREA NAME	AREA GROSS	AREA NET
TX	NF IN TEXAS	08133	FOUR NOTCH	5505	5505
TX	NF IN TEXAS	08020	CHAMBERS FERRY	4817	4651
TX	NF IN TEXAS	08021	GRAHAM CREEK	7765	7765
UT	DIXIE	04259	THE BOX - DEATH HOLLOW	31600	31500
UT	UINTA	04725	BIRDSEYE	13220	13220
UT	UINTA	04729	NEPHI	24000	23930
UT	UINTA	04720	SANTAQUIN	12880	12880
UT	WASATCH	D4757	STANSBURY (D)	11175	11175
UT	WASATCH	04758 *	MOUNT NAOMI	49120	49030
VA	GEORGE WASHINGTON	08174	RAMSEYS DRAFT	13475	13475
VA	GEORGE WASHINGTON	08171	DOLLY ANNE	7900	7900
VA	GEORGE WASHINGTON	08175	SOUTHERN MASSANUTTEN	11800	11800
VA	JEFFERSON	08180	DEVILS FORK	5897	4759
VA	JEFFERSON	08186	MILL CREEK CSA	4000	3870
VA	JEFFERSON	08187	MOUNTAIN LAKE CSA	11827	10228
VT	GREEN MOUNTAIN	09081	BREADLOAF	19850	19850
VT	GREEN MOUNTAIN	09083	DEVILS DEN	8830	8830
WA	GIFFORD PINCHOT	C6035 *	GOAT ROCKS	1770	1770
WA	GIFFORD PINCHOT	A6071	MT MARGARET	24320	20830
WA	GIFFORD PINCHOT	A6061	GLACIER VIEW	3010	3010
WA	GIFFORD PINCHOT	A6035 *	GOAT ROCKS	4270	4270
WA	GIFFORD PINCHOT	06076	INDIAN HEAVEN	27590	27590
WA	GIFFORD PINCHOT	06080	KIPUKA	5480	5030
WA	GIFFORD PINCHOT	06072	ST HELENS	29950	25570
WA	MT BAKER-SNOQUALMIE	L6031	GLACIER PEAK	57320	55220
WA	MT.BAKER/SNOQUALMIE	06054	EAGLE ROCK	34100	33100
WA	OKANOGAN	A6024	LONG SWAMP	10200	10200
WA	OLYMPIC	06086	WONDER MOUNTAIN	9468	9468
WA	WENATCHEE	D6035 *	GOAT ROCKS	19600	19200
WV	MONONGAHELA	09040	CHEAT MOUNTAIN	7720	7720
WY	BIGHORN	02032	ROCK CREEK	51200	51200
WY	BIGHORN	02031	CLOUD PEAK CONTIGUOUS	151410	151410
WY	BIGHORN	02030	LITTLE GOOSE	37750	37750
WY	BIGHORN	02029	PINEY CREEK	23550	23550
WY	BRIDGER-TETON	E4613 *	PALISADES (EAST)	44450	44450
WY	BRIDGER-TETON	S4510	WEST SLOPE TETONS (SOUTH)	9900	9900
WY	MEDICINE BOW	C2087	HUSTON PARK	5210	5210
WY	TARGHEE	W4613 *	PALISADES (WEST)	91380	91380

Mr. **Yates**. How much have you budgeted for this in 1983?

Mr. **Peterson**. I don't think we have broken this down separately because much of it is intertwined with the whole forest management plan.

ENERGY PROGRAMS

Mr. **Yates**. Will the amount that you have available for resources management be sufficient to meet the demands or increases in energy programs?

Mr. **Peterson**. Yes, by targeting those kind of activities.

CULTURAL RESOURCES

Mr. **Yates**. Your consideration of cultural resources can no longer be made at the regional level?

Mr. **Peterson**. I am not following you.

Mr. **Yates**. Well, who now does your cultural resource consideration? Is that done at a regional level?

Mr. **Peterson**. Most of it is done at the forest level in cooperation with the States. I think what you might be referring to is we had a cultural resource program to look at some regional kinds of analyses.

Mr. **Yates**. And you are eliminating those?

Mr. **Peterson**. We are eliminating those in most cases and going more to targeted kinds of things now.

ENDANGERED AND THREATENED SPECIES

Mr. **Yates**. With regard to Endangered and Threatened Species Habitat Improvement, how many recovery projects for stabilized populations have been identified? Do you want to put that in the record?

Mr. **Peterson**. Yes, sir.

Mr. **Yates**. And the costs associated with them.

[The information follows:]

ENDANGERED AND THREATENED SPECIES

Following is a list of recovery projects for stabilized populations identified and the estimated cost of each.

Gizzly Bear investigations	$5,000
Wolf habitat protection	2,000
Peregrine Falcon hacking, introductions	20,000
Osprey nest platform construction	2,000
Sensitive plant habitat improvement	6,000
Total	35,000

Mr. **Yates**. Are you going to have to delay this kind of activity because of budget restraints?

Mr. **Peterson**. I am not aware of any that will be delaying. These are ongoing types of things and we cooperate in a recovery effort with the Fish and Wildlife Service effort in other States.

GRAZING PROGRAM

Mr. **Yates**. You are cutting down the grazing program by $600,000. Are you going to be able to monitor the permitees adequately to ensure resource protection?

Mr. **Peterson**. Yes, we will. The reduction there is for improvement work.

Mr. **Yates**. Are you considering any proposals to make the grazing program pay its own way?

Mr. **Peterson**. The Secretaries of the Interior and Agriculture are required to study grazing fees and report back to Congress in 1985. That study is underway and we expect to make a report back to Congress on the operation of the law and recommendations by 1985.

Mr. **Yates**. Should the number of allotments you make be reduced because of your reduced funding level?

Mr. **Peterson**. No, this will not require a reduction in number of allotments.

WILD HORSE AND BURROS PROGRAM

Mr. **Yates**. I think you told us the 1982 level for the wild horse and burros program is inadequate. Would you tell us if that is true? If the same level is proposed for 1983, it is obviously inadequate. Doesn't that indicate that you are not carrying out your responsibility under the law to manage this population?

Mr. **Peterson**. I am not sure of the reference to the 1982 program being inadequate.

Mr. **Yates**. Well, on page 170 of your justification you say: "In 1981, 278 excess wild horses were removed from territories. This is approximately 64 percent of the national annual increase. Scheduled removals for 1982 and 1983 will allow for increase of population level above those that provide for preserving and maintaining a thriving, natural ecological balance." That seems to indicate that you didn't have enough money to take care of your needs in 1981 and 1982, doesn't it?

Mr. **Peterson**. We are working, as you know, with BLM on a program to try to remove animals. The fee has recently been increased.

Mr. **Yates**. You are cutting down on your adoptions, aren't you?

Mr. **Peterson**. It hasn't had as much effect as the people expected. Adoptions held up pretty well, contrary to popular opinions that there would be a dramatic change. I think part of that is the total cost. When you consider that people go and get them, and so on, the total cost may not be affected as much as we thought.

REDUCTION IN SOIL AND WATER MANAGEMENT

Mr. **Yates**. Soil and water management is being cut back. Your request for soil and water improvements is $300,000, a decrease of $1.5 million. Four hundred acres will be accomplished, compared to 5,580 in 1982. Is there any rationale for this reduction other than diverting funds to support the timber program?

Mr. **Peterson**. Well, Mr. Chairman, looking at soil and water, one of its highest priorities is to prevent future problems. In order to prevent future problems, we need hydrologic and soil expertise in connection with timber sales and so on. So we are putting money in the prevention side, which means we will not be doing rehabilitation of past problems. But I think that is a logical priority in the way we use the funds.

Mr. YATES. Do you have enough money for soil and water management in this budget?

Mr. PETERSON. Well, we have enough to handle this prevention side.

Mr. YATES. I am talking about the whole program.

Mr. PETERSON. We will obviously defer rehabilitation on some of the past problem areas.

NATIONAL FACILITY NEEDS ANALYSIS

Mr. YATES. You talk about a National Facility Needs Analysis. That is under Computer Science, Communications and Data Management. What is the total amount the estimate will be required for this purpose?

Mr. MILES. Over the entire life of the program for providing data and word processing on a distributed basis throughout the Forest Service the costs could well run to $75 or $80 million over the next 5 or 6 years.

Mr. YATES. How much is in this budget for that?

Mr. MILES. There is about $15 million in the 1983 budget, about $15.4 million, Mr. Chairman.

[COMMITTEE NOTE.—Subsequent to the hearing the committee was informed that there is $18 million in the 1983 budget rather than $15 million.]

Mr. YATES. Well, when does this system become operative?

Mr. MILES. We have issued a request for proposals early in March, and we expect to have proposals back from the industry for the acquisition of several hundred small data and word processing systems by about July 6th.

We hope to be able to make a selection early next fiscal year, and to begin to install them shortly thereafter.

Mr. YATES. When will the system become operative.

Mr. MILES. What the system does is places data and word processors on each of the national forests and on most of the ranger districts. These are minicomputers that range in cost anywhere from $20,000 to $60,000 per unit. They provide us with an opportunity not only to do data processing but word processing at the ranger district and at the national forest level.

[COMMITTEE NOTE.—Subsequent to the hearing, the committee was informed the cost ranges from $40,000 to $225,000.]

Mr. MILES. It will be several years before each ranger district or each forest acquires it. It will depend on their own state of preparation, their own need. Each forest will have to do its own needs analysis and justify the acquisition of equipment before we go ahead and procure it.

Mr. PETERSON. The equipment will be operational on an incremental basis.

INTERNATIONAL FORESTRY

Mr. YATES. What is the size of the international forestry staff?

Mr. PETERSON. It is about four people.

Mr. YATES. What is the funding level?

Mr. PETERSON. I am not sure we have that with us. It is a part of the research organization because a lot of the activities related to international exchange of seeds, searching for parasites in other countries, coordination of international meetings and so on. I am not sure we have it with us.

Mr. YATES. You have an international liaison coordination staff?

Mr. PETERSON. We call it an international coordinating staff.

Mr. YATES. Are there functions handled at the departmental level?

Mr. PETERSON. That is handled at our level. Now the Department, in addition, has a Foreign Agricultural Service.

Mr. YATES. I know it does. Why couldn't they handle it?

Mr. PETERSON. Well, ours is very, very specific. For example, I have already mentioned the agreements with Canada and Mexico specific to fire and insects. So it is just more efficient to handle that part of it directly. We do coordinate closely with the Department and the Foreign Agricultural Service.

CONSTRUCTION

Mr. YATES. Construction is 58 percent of RPA, and an increase of $42 million over 1982.

Mr. PETERSON. That is made up of two basic items. One is the increase in the road program related to the increased timber program, and the replacement of the large Fire Emergency Service Center that was destroyed last year when one of our own airplanes, on takeoff, crashed into the building and killed all the people aboard and destroyed the entire Center.

Mr. YATES. Well, you want $450,000 for research construction for eliminating critical health and safety hazards. Is this all the money you need to eliminate them?

Mr. PETERSON. That is to eliminate the high priority health and safety items. Research laboratories, some that we opened years ago, do not provide adequate storage for toxic substances that are used in the laboratories, and sometimes don't provide adequate emergency shower facilities. We have had a safety expert look at most of our laboratories and make a specific analysis of health hazards.

Mr. YATES. Will you detail those for the record?

Mr. PETERSON. Yes, we will.

[The information follows:]

RESEARCH CONSTRUCTION

An itemized listing of research health and safety related construction projects for each Experiment Station and the Forest Products Laboratory appears below:

Pacific Northwest Forest and Range Experiment Station

Item Description	Estimated Cost	Location
Smoke detection system	$12,000	Wenatchee, WA
Smoke detection system	$12,000	Olympia, WA
Exit protection for basement offices	$20,000	Fairbanks, AK
Wiring repair	$4,000	Wenatchee, WA
Fumehood repair	$90,000	Corvallis, OR
Fumehood repair	$35,000	Fairbanks, AK
Fumehood repair	$30,000	Olympia, WA
Fumehood duct repair	$5,000	Wenatchee, WA
Fumehood duct repair	$5,000	La Grande, OR
Smoke detection system	$18,000	Wenatchee, WA
Smoke detection system	$30,000	Corvallis, OR
Exit protection for basement offices	$20,000	Wenatchee, WA
Repair water main	$10,000	Cascade Head Experimental Forest
Chemical storage building	$30,000	Fairbanks, AK
Chemical storage building	$20,000	La Grande, OR
Chemical storage building	$20,000	Wenatchee, WA
Chemical storage building	$20,000	Olympia, WA
Sulphuric washdown hood replacement	$35,000	Corvallis, OR
Exhaust system at work storage area	$15,000	Corvallis, OR
Subtotal	$431,000	

Pacific Southwest Forest and Range Experiment Station

Item Description	Estimated Cost	Location
Chemical storage building	$40,000	Placerville, CA
Air condition system replacement	$110,000	Riverside, CA
Gravity sterilizer	$65,000	Berkeley, CA
Subtotal	$215,000	

Intermountain Forest and Range Experiment Station

Item Description	Estimated Cost	Location
Bring electrical system up to code	$3,000	Moscow, ID
Bring electrical system up to code	$15,000	Boise, ID
Bring electrical system up to code	$2,000	Milford, UT
Construct flammable storage shed	$8,000	Moscow, ID
Construct flammable storage shed	$8,000	Missoula, MT
Construct flammable storage shed	$8,000	Provo, UT
Construct handicapped access to Northern Forest Fire Laboratory	$3,000	Missoula, MT
Construct basement exit to meet code	$20,000	Missoula, MT
Install smoke detection and fire alarm system	$4,000	Provo, UT
Install smoke detection system in conjunction with existing alarm	$4,000	Missoula, MT
Install smoke detection and fire alarm system (Forestry Sciences Laboratory)	$10,000	Missoula, MT
Install smoke detection and fire alarm system (Administrative Building)	$10,000	Missoula, MT
Upgrade the fire alarm system	$3,000	Moscow, ID
Install a smoke detection system	$3,000	Bozeman, MT
Install smoke detection fire alarm system (three buildings)	$30,000	Boise, ID
Install smoke detection and fire alarm system	$10,000	Logan, UT
Construct handicapped access	$15,000	Boise, ID
Bring electrical system up to code	$22,000	Ephriam, UT
Subtotal	$178,000	

Rocky Mountain Forest and Range Experiment Station

Item Description	Estimated Cost	Location
Replace asbestos material under scientific ovens	$450	Rapid City, SD
Installation of overtemperature switches on scientic ovens	$1,000	Rapid City, SD
Installation of GFI's (ground fault interrupter)	$300	Rapid City, SD
Rewiring	$2,250	Rapid City, SD
Repair parapet wall	$2,500	Rapid City, SD
Rewiring for x-ray unit	$200	Lincoln, NE
Ventilation system for chemical storage room	$300	Lincoln, NE
Fire alarm system for headhouse	$5,000	Lincoln, NE
High temperature vent for headhouse	$1,000	Lincoln, NE
Chemical storage building	$20,000	Fort Collins, CO
Corrosion proof hood (replacement)	$8,000	Tempe, AZ
Drying ovens (replacement)	$2,000	Tempe, AZ
Plumbing and drainage for safety shower	$6,000	Tempe, AZ
Scientific oven (replacement)	$4,000	Flagstaff, AZ
Removal of inoperative heater	$1,000	Flagstaff, AZ
Subtotal	$54,000	

North Central Experiment Station

Item Description	Estimated Cost	Location
Fumehood increase face velocity	$20,000	Station-wide
Electrical modifications to meet OSHA	$46,000	Station-wide
Flammable storage facility, purchase or construction	$25,000	Rhinelander, WI
"	$5,000	East Lansing, MI
"	$5,000	Kawishiwi, MN
"	$10,000	Houghton, MI
"	$5,000	St. Paul, MN
"	$15,000	Carbondale, IL
Chemical storage facilities	$13,500	Carbondale, IL
"	$13,500	Rhinelander, WI
"	$2,000	St. Paul, MN
"	$2,000	Grand Rapids, MN
Subtotal	$162,000	

Northeastern Forest Experiment Station

Item Description	Estimated Cost	Location
Five remote chemical storage buildings	$50,000	Throughout NE
Ground fault interrupters	$20,000	Throughout NE
Upgrade greenhouse electricity	$20,000	Delaware, OH
Air exhaust	$5,000	Warren, PA
Anti-syphon devices	$5,000	Throughout NE
Outside storage gas cylinders	$4,000	Delaware, OH
Remove asbestos ceiling in mechanical room	$15,000	Burlington, VT
Improved driveway entrance and provide handicapped entrance	$25,000	Hamden, CT
Fire escape for dormitory	$15,000	Bartlett Experimental Forest
Subtotal	$159,000	

Southeastern Forest Experiment Station

Item Description	Estimated Cost	Location
Chemical storage building	$20,000	Athens, GA
Chemical storage building	$20,000	Research Triangle Park, NC
Install sprinkler system--Housing Test Building	$5,000	Athens, GA
Pesticide storage building	$20,000	Macon, GA
Pesticide storage building	$20,000	Olustee, FL
Pesticide storage building	$20,000	Coweeta, NC
Pesticide storage building	$20,000	Charleston, SC
Replace FS owned overhead electrical lines	$750	Bent Creek Experimental Forest
Replace FS owned overhead electrical lines	$750	Asheville, NC
Replace FS owned underground natural gas lines	$10,000	Bent Creek Experimental Forest
Replace FS owned underground natural gas lines	$10,000	Asheville, NC
Subtotal	$146,500	

Southern Forest Experiment Station

Item Description	Estimated Cost	Location
Chemical Storage Building	$9,000	Pineville, LA
Chemical Storage Building	$8,000	Gulfport, MS
Chemical Storage Building	$8,000	Stoneville, MS
Upgrade Wiring	20,000	Puerto Rico
Pesticides Storage Building Johnson Tract	$15,000	Pineville, LA
Pesticides Storage Building	$15,000	Gulfport, MS
Pesticides Storage Building Longleaf Tract	$15,000	Pineville, LA
Resurface Greenhouse Floors	$7,000	Gulfport, MS
Upgrade Wiring-Longleaf Tract	$13,000	Pineville, LA
Upgrade Wiring and Install Fire Alarm System	$10,000	Crossett, AR
Central Fire Alarm and Improved Wiring	$15,000	Stoneville, MS
Freight Elevator	$50,000	Gulfport, MS
Safety Hood	$3,000	Pineville, LA
Exhaust Fans	$2,000	Pineville, LA
Subtotal	$190,000	

Forest Products Laboratory

Item Description	Estimated Cost	Location
Replace main electrical service--Bldg. 1	$225,000	Madison, WI
Ventilation system balancing	$150,000	Madison, WI
Enclose fire escapes	$175,000	Madison, WI
Electrical and mechanical system deficiencies	$600,000	Madison, WI
Repair standpipe and hose	$100,000	Madison, WI
Renovate monumental stairwell	$75,000	Madison, WI
Install sprinkler system	$50,000	Madison, WI
Subtotal	$1,375,000	
GRAND TOTAL ALL SAFETY AND HEALTH CONSTRUCTION PROJECTS	$2,910,500	

TELECOMMUNICATIONS AND IMPROVEMENTS

Mr. **Yates**. In 1982 you provided $636,000 for telecommunications and improvements. You want another $502,000. Will that complete the funding for these?

Mr. **Peterson**. No, this is an ongoing project to upgrade our communications facilities. For example, the two national forests in Virginia depended on some radio relay stations and the equipment is now worn out. We replaced them with equipment that is more reliable and has better capability. It partially uses microwave technology.

Most communications equipment lasts 6 to 10 years.

Mr. **Yates**. What is a high-hazard dam?

HIGH-HAZARD DAM

Mr. **Peterson**. A high-hazard dam is a dam that usually has enough storage capacity and proximity to a built-up area so the failure of the dam would cause substantial downstream property damage and potential loss of life.

Mr. **Yates**. How many high-hazard dams do you have?

Mr. **Peterson**. We have completed the inventory in cooperation with the Corps of Engineers recently, and I don't know that we have the data with us.

Mr. **Housley**. We could provide that for the record.

Mr. **Yates**. What is the condition of your high-hazard dams?

Mr. **Peterson**. Most of the so-called high-hazard dams are under permit on national forest land. They are not really owned by us.

Mr. **Yates**. Who owns them?

Mr. **Peterson**. It could be owned by an irrigation company, utility company, municipalities; a whole variety.

Mr. **Yates**. But who is responsible for their maintenance?

Mr. **Peterson**. The owner of the dam, and we are taking action in those cases to get the situation corrected.

Mr. **Yates**. What situation?

Mr. **Peterson**. Where there are high-hazard dams. That is part of the national survey of dams.

Mr. **Yates**. How many such dams are there where there are critical deficiencies?

Mr. **Peterson**. I just don't have it.

Mr. **Yates**. Would you put that in the record?

Mr. **Peterson**. Yes, sir.

[The information follows:]

HIGH HAZARD DAMS

A listing of the number of dams classified in the high-hazard category follows:

Region:	*Number*
Northern (R-1)	35
Rocky Mountain (R-2)	138
Southwestern (R-3)	17
Intermountain (R-4)	132
Pacific Southwest (R-5)	162
Pacific Northwest (R-6)	32
Southern (R-8)	31

Region:	Number
Eastern (R-9)	30
Alaska (R-10)	7
Total	584

Of the total 584 high-hazard dams, 68 have been identified as having deficiencies with respect to the Federal Guidelines for Dam Safety.

Region:	Number
Northern (R-1)	19
Rocky Mountain (R-2)	8
Southwestern (R-3)	17
Intermountain (R-4)	10
Pacific Southwest (R-5)	4
Pacific Northwest (R-6)	4
Southern (R-8)	6
Eastern (R-9)	0
Alaska (R-10)	0
Total	68

Reconstruction or rehabilitation efforts are currently underway on seven of these structures, one in Region 2, five in Region 4, and one in Region 1.

Mr. YATES. Also, would you furnish that to the committee at the time you put it in the record, because we don't want that to be lost.

Of course we don't want the dams to be in a condition where failure to take care of them will result in loss of life or injury to people and to property.

Mr. PETERSON. That was the purpose of this nationwide survey.

Mr. YATES. I think we asked you to do it. What about low-level dams. Not the high hazard-dams, but there are other dams that you have that we went into at one time.

Mr. PETERSON. Yes. We classified them that way, and I think this report will provide you with that information.

Mr. YATES. All right. Provide the committee with a copy of that report.

[The information follows:]

DAM SURVEY

A progress report on "Implementation of Federal Guidelines for Dam Safety" was prepared in December 1981 in cooperation with the Corps of Engineers. A copy of this report follows.

Implementation of Federal Guidelines for Dam Safety
December 1981 Progress Report

I. Introduction

The USDA Forest Service (FS) provides national leadership in the uses of National Forests and Grasslands, including the watershed lands. Most of the activity is directed toward the management of National Forests and Grasslands, or providing forestry assistance for areas that are privately owned or are administered by other government agencies. Because of the diverse legislation which directs its actions, the Forest Service has a complex involvement with dams. The agency has some degree of control and responsibility for over 2,000 dams included in the national inventory of dams prepared by the Corps of Engineers.

The Forest Service plans, designs, constructs, operates, and maintains dams in connection with various activities associated with the management of National Forests and Grasslands. These dams are part of general programs such as watershed protection, wildlife habitat improvement or recreation area development. The FS also administers dams constructed and operated by private and non-Federal agencies. These dams are either on Forest lands or, if on private land, they may affect Forest lands in some way. The owners are responsible for designing, building, and operating their dams; but, the Forest Service must protect the public interest by review and approval of such activities which are specifically related to dam safety as well as other aspects of Forest management. The FS has no problems regarding differences between regulatory requirements and the Guidelines. Problems with implementation of the Guidelines are discussed in subsequent paragraphs.

II. Significant Actions Since January 1980 Report

Progress toward full implementation of the Guidelines varies considerably among FS Regions, primarily based on the magnitude of the job to be accomplished by the individual units. For example, one Region has completed all emergency action plans, while others are just getting started.

However, the Forest Service has established a target date of September 30, 1982, for completion of emergency action plans for all existing Forest Service owned high and selected moderate hazard dams. The agency plans to meet this target.

Virtually, all Phase I safety inspection have been completed for existing high and selected moderate hazard agency dams. The FS has neither the funding or the manpower to complete the necessary rehabilitation work by the Guideline compliance date of December 31, 1983. This is discussed in further detail in section III.

The following actions listed in the January 1980 report, as planned, have been implemented:

- Establishment of a permanent USDA dam safety committee to coordinate and provide leadership for dam safety activities in the department.

- Integration of the role and responsibilities of the FS dam safety officer into national policy contained in FSM 7500.

- Evaluation of the need to designate an operator for each dam.

- Integration into construction and management direction; a process to ensure construction personnel are aware of design philosophies and assumptions.

- Revision of Forest Service Manual direction to assure that instrumentation systems are observed and the date recorded and evaluated.

The following actions are still planned:

- Assess state-of-the-art of risk based analysis for possible application in Forest Service dam safety programs.

- Assess adequacy and competence of technical staffing for dam management and operation.

- Evaluate the necessity for an operator training program.

- Evaluate Guidelines for control of flows during construction.

- Develop a hazard evaluation procedure to assure uniformity for planning, designing, and managing dams (this will be done in conjunction with ICODS Subcommittee No. 1 which is currently working on this issue.)

III. Implementation Progress

1. The Chief is responsible for ensuring that the Forest Service, as a matter of policy and in actual practice, makes every reasonable and prudent effort to ensure safety of dams located on National Forest administered lands.

The Forest Service dam safety officer is advisory to the Chief, through the Washington Office (WO) Director of Engineering on matters related to safety of dams and is responsible for:

- Recommending Service-wide policies, standards, and guidelines for design, construction and maintenance of water storage and transmission work.

- Establishing procedures for conducting the work.

- Coordinating Service-wide engineering aspects of the work with other agencies, departments, and organizations.

- Arranging technical leadership and consulting services for Regional Foresters and staff.

- Monitoring and reporting on the quality and effectiveness of Regional administrative and technical practices.

The Forest Service dam safety officer position is currently vacant. It is being handled on an interim basis by other engineering personnel.

2. The FS has previously reported two problem areas with respect to full compliance with the Guidelines by December 31, 1983. These problem areas still remain.

Rehabilitation of Existing Dams

As previously noted budget and manpower constraints will not allow the FS to complete rehabilitation of existing dams by the Guideline compliance date. The FS had previously extended this compliance date to September 30, 1985. It now appears that the agency will not be able to meet this schedule.

It is estimated to cost $20 million to rehabilitate the existing, top priority, high and moderate hazard FS dams to meet current criteria. Alternatives to rehabilitation through drawdown or breaching are considered technically, economically or politically infeasible. The many program mandates and priorities of the FS result in the necessity of taking certain calculated risks in accepting substandard conditions. The FS will not be able to carryout all needed corrective actions to meet safety requirements and comply with the Guidelines.

The Corps of Engineers' non-Federal dams inspection program involves a number of structures under FS administrative control. These dams are subject to the same requirements as agency dams. As the Corps completes their inspections, the FS will work with the owners and involved states to develop plans and schedules for correcting safety related deficiencies. Due to variables such as owner financial ability as well as State and FS enforcement ability; a Service-wide compliance schedule for these permitted dams has not been established.

Emergency Action Plans

Due to the major coordination effort necessary for preparation of emergency action plans for the approximately 1,000 non-Federal dams located on National Forest lands, the December 31, 1983, deadline is not considered practical. It is expected that December 31, 1985, is earliest feasible target date for completion of this work. Priority will be given to preparation of plans for potentially high hazard dams.

3. Most field offices have taken no actions to eliminate or mitigate shortages in areas of expertise as current staffing is adequate. However, three Regions have recently filled Regional Hydraulic Engineer positions, which have been vacant. This will intensify Regional leadership in these areas.

Several Regions have provided for specialized training of existing staff to strengthen expertise. One field office has utilized the services of State personnel to assist in dam inspections.

4. Most Regions have conducted some training for field personnel either through on-the-job techniques or by individual one-on-one training in the field. Four Regions are planning formalized classroom and field training in FY 1982. Regions have also sent their personnel to other agency training courses.

5. Status of inventory by hazard class:

Region	No. of Dams by Hazard Class		
	High	Moderate	Low
Northern	35	45	27
Rocky Mountain	138	245	151
South Western	17	41	0
Intermountain	132	136	118
Pacific Southwest	162	405	0
Pacific Northwest	32	41	38
Southern	31	0	163
Eastern	30	98	36
Alaska	7	4	6
Total	584	1,015	539

The above listing is only for dams that are included in the national inventory of dams prepared by the Corps of Engineers. It does not include the approximately 15,000 additional dams on National Forest lands that are less then 25 feet in height or store less than 50 acre-feet of water.

6. Status of independent reviews:

Region	Type of Review		
	Design	Construction	Operations
Northern	1	0	0
Rocky Mountain	7	7	0
South Western	0	0	0
Intermountain	8	6	3
Pacific Southwest	3	0	0
Pacific Northwest	0	0	0
Southern	0	0	0
Eastern	14	2	0
Alaska	0	0	0
Total	33	15	3

For the most part, all of the above reviews were internal, although in the Northern and Rocky Mountain Regions, independent reviews were also made by the States of Montana and Colorado. In the Eastern Region, seven of the design reviews were external, technical reviews performed by consultant engineers.

7. Status of periodic inspections of existing dams:

Region	Type of Inspection Intermediate	Formal	Special
Northern	38	25	0
Rocky Mountain	150	82	0
South Western	45	6	0
Intermountain	176	21	3
Pacific Southwest	325	10	0
Pacific Northwest	104	4	0
Southern	71	0	0
Eastern	10	9	0
Alaska	5	0	0
Total	924	157	3

8. Dam safety rehabilitation program:

Region	No. of Dams with Active Rehabilitation
Northern	1
Rocky Mountain	13
South Western	1
Intermountain	11
Pacific Southwest	2
Pacific Northwest	6
Southern	0
Eastern	0
Alaska	2
Total	36

The number of dams with current rehabilitation activity does not give a meaningful picture of the status without also having the number of dams with identified deficiencies.

The Rocky Mountain Region for example, has 15 FS owned dams which need rehabilitation work based on Phase I inspections and work on only one is underway.

The Northern Region has 22 special-use permit dams that are not in compliance with the Guidelines and repair work is underway on only one. Other Regions face the same situation, some to a lesser extent than others.

9. Status of emergency planning program.

Completion of emergency action plans for existing high and selected moderate hazard FS owned dams varies widely among Regions. Some Regions are almost complete, others are just getting started. However, all Regions plan to have all required planning completed by September 30, 1982. Emergency action plans for permitted dams are not anticipated to be completed until December 31, 1985.

10. One Region conducted an internal review of dam management activities. Findings indicated that administrators at the field level are cognizant of dam program requirements and continue to pursue goals although progress is slow because of budget constraints.

11. Agency involvement with State personnel varies widely among Regions, and also on the current staffing and capabilities of individual States. While general working relationships have been established with all States where the FS has active programs or projects, such States as California, Colorado, and many of the other western States have had very actice participation with FS dam projects. The result has been increased technical assistance, particularly on unusual problems. Assistance has also been provided in the area of enforcement for help in getting necessary repair work accomplished on permitted dams.

12. The agency has done some coordination with State and local governments regarding land use planning in general, but none specifically related to restricted development in flood plains downstream from dams. The agency plans to do more coordination in this area as emergency action plans and inundation mapping is completed.

13. The FS and SCS has a Memorandum of Agreement for exchange of technical services on a Service-wide basis as needs arise and individual agency staffing permits. This has worked well. The formation of the Interagency Committee on Dam Safety (ICODS), and subsequent subcommittees has greatly improved interagency communications and technology exchange.

14. Formalized risk analysis procedures are not used in prioritization of dam inspections and rehabilitation work. Both of these items are based on the relative safety of the individual structure and sound professional engineering judgment in the decisionmaking process and availability of funds.

A type of risk analysis is currently used through the means of the "Analytical Procedure for Sizing Dam Spillways." This procedure defines a method for determining if an exception to the recommended spillway design flood magnitude is justified. The approach is based on demonstrating that economic loss and/or the potential for loss of life resulting from dam failure during occurence of the proposed spillway design flood would be essentially the same as would occur without a dam failure.

15. No dam failure or structural accidents to report.

16. The agency had a proposed research project to determine the "state-of-the-art and effectiveness of stabilizing embankment type dams to reduce potential or prevent breaching due to overtopping," funded in FY 1982. However, the proposed project was cut from the budget. No other studies are planned.

Mr. **Yates**. When was it completed?

Mr. **Peterson**. Last year.

Mr. **Yates**. We would like to see it.

ROAD CONSTRUCTION AND TIMBER

How much of the $271 million requested for Forest Service road construction is related to the timber program?

Mr. **Peterson**. Ninety-plus percent.

Mr. **Yates**. And how much is included for recreational roads?

Mr. **Peterson**. It is a very small amount, about $8 million, mostly for rehabilitation for high-use areas where we have serious problems. I should point out that most of the $271 million will be used by recreationalists, hunters and fishermen.

Mr. **Yates**. What about the Zilpo Point Recreation Area on Cave Run Lake in Kentucky. Are there funds in this year to complete construction of the road?

Mr. **Peterson**. I believe that project is in this year's funding.

Mr. **Housley**. I would have to check that.

Mr. **Peterson**. I think part of it is in this year's funding.

[The information follows:]

Zilpo Point Recreation Area

No funds are included in the 1983 Budget for the Zilpo Point Recreation Area road. Access to the Zilpo Point Recreation facilities involve 5½ miles of Road 129 and 8½ miles of Road 918. To date, 3½ miles of Road 129 have been constructed and paved in 1981 through cooperation with the State. The Forest Service shared by contributing $543,708. The remaining 2 miles are scheduled for reconstruction in 1986.

Base and pavement for the 8½ miles of Road 918 is scheduled for accomplishment in 1985 when the Corps of Engineers will program $1,025,000 and the Forest Service will program $800,000 to complete the project.

YOUTH CONSERVATION CORPS

Mr. **Yates**. Did Mr. Dicks ask you about the YCC program?

Mr. **Peterson**. No, sir.

Mr. **Yates**. Well, is there anything in the budget for the YCC program?

Mr. **Peterson**. No separate item.

Mr. **Yates**. Will you be using YCC personnel in this budget?

Mr. **Peterson**. Well, what we are doing in 1982, as you may recall, is using the regular funding in the program to use YCC-type of employment, to hire young people as directed by the Congress. Mr. Miles can tell you what is in this year's program.

Mr. **Yates**. Yes, tell us, Mr. Miles, what is happening this year and what is going to happen in 1983.

Mr. **Miles**. As you recall, Mr. Chairman, the Congress last year authorized us to use not less than $1 million, or more than $3 million, to carry out a YCC-type program this summer, Fiscal Year 1982.

Mr. **Peterson**. Using regular funds.

Mr. **Miles**. Yes.

So we have asked each of our regions to investigate its program to determine the extent to which they can use these youngsters this summer. And, in order to make the maximum use of the youngsters, we have suggested that they not run a residential program as we have run in the past. A residential program tends to be more expensive, so we can offer the program to more young people if we have it as a nonresidential program. And we expect to use about $1.7 million this year for our YCC program.

LANGUAGE CHANGES

Mr. **Yates**. You want to eliminate language prohibiting the change in boundaries or closure of regional offices without congressional consent. What is the reason for that?

Mr. **Peterson**. We have made that request, Mr. Chairman, each year for several years, feeling that we need to continually look at the most efficient organizational patterns, whether it is the number of ranger districts, the number of forests, or the number of regions.

We would, of course, discuss any proposed changes proposed to the committee.

Mr. **Yates**. Is there anything else you want to tell us that we haven't covered?

Mr. **Peterson**. Yesterday you asked about a tree, the Melaleuca and we have more than you ever wanted to know about Melaleuca that we will leave with you for reading.

Mr. **Yates**. Well, I will send it out to Loxahatchi Wildlife Refuge.

Mr. **Peterson**. It was initially introduced in Florida. The tree originated in Australia.

Mr. **Yates**. This doesn't happen to come within your purview, does it?

Mr. **Peterson**. Well, if it becomes a problem on areas that we manage, yes.

Mr. **Yates**. Well, do you help wildlife refuges, the Fish and Wildlife Service, where they ask your help?

Mr. **Peterson**. Yes. In fact, our insect and disease money is spent on all kinds of Federal lands including national parks, fish and wildlife refuges. We provide technical assistance, also.

Mr. **Yates**. Well, the Melaleuca is engulfing this place. I am surprised they haven't talked to you; but they haven't talked to you on fire prevention, either.

We will have some questions for the record to which we will ask you to respond.

Thank you, Chief. Thank you, Mr. Secretary.

[Whereupon, at 4:05 p.m., the subcommittee was recessed, to reconvene subject to the call of the Chair.]

[The questions and answers follow:]

ADDITIONAL COMMITTEE QUESTIONS

Personnel Reductions

It has been reported that all of the USDA agencies, the Forest Service (FS) will take the biggest cuts in 1983, especially with regard to personnel cuts.

Question: How many FS positions in total will have been eliminated by 1983, if the 1983 budget request is approved?

Answer: The Forest Service is by far the largest USDA agency and represents 38 percent of USDA employment. The number of positions being eliminated from fiscal year 1982 to 1983 is approximately 1700. The personnel reduction is proportionate to the size of the Forest Service. Several smaller agencies in USDA are proposed for greater percentage reductions for specific programmatic reasons.

Timber Contract Extensions

The current round of contract extensions is the second in two years.

Question: What percentage of contracts that would have come due since October 1 have been extended?

Answer: Each region has reported that nearly 100 percent of all sales with an expiration date after October 1, 1981, have been extended.
There have been less than 1 percent of all timber sales that have not
been extended, but this has been due to lack of a request from the timber purchaser for the extension.

Question: Where are those extensions taking place?

Answer: Each national forest has reported some sales extended since last October. Sales extensions are taking place Service-wide.

Questions: What conditions are attached to the extensions?

Answer: The conditions are outlined in Interim Directive Number 71 which has previously been submitted to the Committee.

Questions: How much of the road construction and timber sales programs are specifically aimed at "old growth" areas that might be subject to disease or decay if not harvested in the near future? Provide details for the record, if necessary.

Answer: About 84 percent of the FY 1983 timber sale program involves old growth timber. Over $235 million of the forest road program is involved in the preparation and construction of access roads to "old-growth areas.

Forest Research

A Forest Service Report, entitled "Criteria for Deciding About Forestry Research Programs," was issued in July 1981. Among the conclusions of the report were:

- the public sector is underinvesting in agricultural and forestry R&D, considering the rates of return and contributions to productivity growth;

- research has failed to keep pace with the expansion of National Forest System land management and related need for technology;

- Forest Service research has fallen behind agricultural and forestry-related research in other Federal agencies;

- at the national level, research functions most deserving of increases are: economics and marketing; recreation and environmental values; watershed management; and timber management.

Question: What conclusions have you drawn with regard to the relationship between investment in forest research and increases/decreases in productivity?

Answer: We believe that investments in forestry research result in productivity increases parallel to those realized from research investments in agriculture, medicine, and other areas. An analysis of several recent forestry research innovations showed that benefits include creation of income or employment, increased utilization of natural resources, improved environmental quality, new or improved products, improved decisionmaking, reduced management costs, and lower cost or prices for commodities.

Question: If the need to reduce the budget were not a consideration, are there any research activities you would identify as particularly underfunded?

Answer: The negative impacts of budget increases cannot be ignored. An increase in funding would be counter to the 1983 President's Budget goals of reducing the federal deficit and controlling inflation. As a result of detailed analyses in which we evaluated projects against a specific set of criteria, we identified our highest priority needs and included those projects in the President's Budget.

The Resources Program & Assessment process, joint planning efforts of the Department of Agriculture and the Land Grant Colleges, and other research planning efforts have identified numerous areas of forestry research that deserve attention. These areas cover the full spectrum of forestry-related activities. Priorities for increased funding vary according to local needs. At the national level, however, research on economics and marketing, recreation and environmental values, watershed management, and timber management would be given the most consideration for any increase in funding.

Question: Would you agree, at this time, with the functions the Report identifies as most deserving of increases?

Answer: Yes, we agree with the priorities at the national level listed in the report, "Criteria For Deciding About Forestry Research Programs." However, much forestry research is aimed at solving important local and regional problems. Thus, local and regional priorities may differ somewhat from priorities at the national level.

The report mentions two areas with especially important needs: basic research and international forestry.

Question: What portion of your research programs in 1983 will represent basic research? How does this compare to 1981 and 1982?

Answer: The recent analysis of research programs conducted in cooperation with the Department and Office of Management and Budget shows that about 38 percent of the Forest Service research budget in 1981 supported basic research. This proportion has fluctuated only slightly in recent years. Although research programs would be reduced in 1983, the historical balance between basic and applied research would be maintained.

Question: In a period of budget reductions, should more or less of your research budget be directed to basic research?

Answer: During a period of budget reductions, each research program, including the balance between basic and applied research must be carefully examined in relation to needs and priorities. We believe that applied research efforts depend upon a firm foundation of basic research. Thus, a balance is needed at any funding level. We support a balance in the range of 60 to 70 percent applied research and 30 to 40 percent basic research.

Question: How much is included for international forestry research? What were the funding levels in 1981 and 1982? What kind of activities are included? (Provide a breakdown for the record, if necessary).

U.S. Department of Agriculture
Forest Service

INTERNATIONAL FORESTRY, 1981 and 1982
(Appropriation in thousands of dollars)

State	City	Short Title	Budget Activity*	1981	1982	1983
HAWAII	Honolulu	Tim. and Watershed Mgmt.	TMR	184	163	167
			WMR	174	145	131
			WRFHR	12	0	0
			GA	0	65	66
				370	373	364
	Honolulu	Pacific Islands Forestry	TMR	27	32	104
			WMR	99	93	0
			FFASR	47	0	0
			GA	0	23	23
				173	148	127
	Honolulu	Native Hawaii ecosystems	WMR	20	18	0
			WRFHR	295	278	0
			GA	0	43	0
				315	339	0
	Honolulu	Forest protection, research	FIDR	312	276	176
			TMR	5	4	0
			GA	0	64	37
				317	344	213
		TOTAL HAWAII		1,175	1,204	704
PUERTO RICO	Rio Piedras	Tropical silvics & silvicul.	TMR	598	587	693
			WRFHR	156	139	118
			GA	0	110	117
		TOTAL PUERTO RICO		754	836	928
		TOTAL, INTERNATIONAL FORESTRY		1,929	2,040	1,632

U.S. Department of Agriculture
Forest Service

OTHER RESEARCH RELATED TO INTERNATIONAL FORESTRY
(Appropriation in thousands of dollars)

State	City	Short Title	Budget Activity*	1981	1982	1983
Wisconsin	Madison	Biodegradation of wood	FIDR	396	359	267
			FPUR	157	57	0
			GA	0	76	46
				553	492	313
	Madison	Protection of wood in use	FPUR	1,082	1,172	1,080
			GA	0	233	188
				1,082	1,405	1,268
Mississippi	Gulfport	Control of Wood biodeterioration	FIDR	718	688	698
			GA	0	103	95
				718	791	793
	TOTAL RESEARCH RELATED TO INTERNATIONAL FORESTRY			2,353	2,688	2,374
	GRAND TOTAL ALL INTERNATIONAL FORESTRY			4,282	4,728	4,006

*GA is General Administration; TMR is Timber Management Research; WMR is Watershed Management Research; WRFHR is Wildlife, Range, and Fish Habitat Research; FIDR is Forest Insect and Disease Research; and FPUR is Forest Products Utilization Research.

Question: What is the rationale for funding in this activity, particularly when research aimed at improved resource protection and management is being cut back?

Answer: The Forest Service supports international forestry research because significant advances in methods to improve productivity of forest and range resources in the United States and throughout the world come from cooperative development and exchange of scientific and technological information among nations. The Forest Service provides leadership for United States participation in international programs in forest science.

Growing demands from a rapidly expanding world population now threaten the capacity of forest and rangelands to sustain the balanced mix of uses needed for a stable world economy.

Through participation in international forestry research, the United States can help deliver the scientific and technological means to increase world forage production and timber growth and to improve utilization of wood material...thus effectively increasing yields while at the same time protecting the environment.

Research efforts can do much to increase the supplies of wood and forage worldwide by:

1. developing new and better ways to manage forests and rangelands
2. developing new and improved plant varieties and ways to control undesirable species
3. conducting basic research needed to increase the knowledge base in tropical and subtropical land/resource management
4. finding new ways to motivate people to improve the care and use of forest and rangelands.

For the past two years, you have identified 5 RPA research initiatives receiving special emphasis: eastern hardwood utilization, softwood utilization and intensive culture, rangeland rehabilitation, anadromous fish habitat, and water and air quality.

Question: What is the impact of the proposed 1983 reductions on these initiatives?

Answer: Budget reductions are needed in 1983 to reduce federal spending and to keep the federal deficit from increasing. We evaluated our research progrm in considerable detail in view of the priorities of the Administration. The research activities funded in the President's budget will effect the greatest return while supporting the Administration's priorities. The impacts of this necessary federal restraint on the RPA initiatives are:

Eastern hardwood utilization:

Development of technology for the improved use and management of the hardwood resource will be delayed. Selected areas of lower priority will be terminated or substantially reduced. Examples of the type of programs to be terminated include research on exotic hardwood species, basic physiology of hardwood ecosystems, and research on selected disease problems. Related efforts in multiresource surveys and utilization of small diameter low-value trees for construction will be reduced.

Softwood utilization and intensive culture:

The development of management guidelines for selected western softwood forest types, including interior Douglas-fir and ponderosa pine, and ponderosa pine and lodgepole pine in the Pacific Northwest will be delayed. In addition, certain types of forest regeneration and nutrition research will be terminated. Basic studies on the biology of selected forest pests will be terminated or greatly reduced. Related efforts in multiresource surveys and harvesting small timber will also be reduced.

Rangeland rehabilitation:

Range evaluation, assessment of resource interactions under various management strategies, will be reduced and redirected to maintain our core programs on increasing forage production on forest and rangelands and reducing conflicts between grazing and other resources use.

Anadromous fish habitat:

The anadromous fish habitat research program remains intact.

Water and air quality:

Efforts will be increased on research relating to acid rain, specifically in terrestrial effects, aquatic effects, and deposition monitoring.

Question: Is hardwood research still a priority? Why or why not?

Answer: Hardwood research remains a long-term priority in the Forest Service research program. Eastern hardwoods cover some 248 million acres of land, which is slightly more than half the commercial forest area of the entire country. The abundant supply of existing hardwoods in relation to demand reduces the overall priority on hardwood research over the short run. Emphasis will continue in management and establishment of high value species and on practices for improving the quality of low value stands.

Question: What is the status of the other 18 research initiatives identified in the 1980 RPA? Have any been funded?

Answer: Forestry research is currently conducted in all 23 initiatives identified in the 1980 RPA Recommended Program, but the level of activity varies. This list of initiatives serves as a target for planning for Forest Service and university programs.

Question: What progress have you made in pest-related research, particularly with regard to the gypsy moth problem?

Answer: Considerable progress has been made in pest-related research.

- In the south, methods to help control brown spot on longleaf pine have now be developed, including selection of pine seedlings, use of mycorrhizae to stimulate early height growth, and systemic fungicide root dips. These procedures have enabled longleaf pine to quickly begin height growth and grow out of susceptibility to brown spot disease.

- In the southeast, control of the introduced pine sawfly has been effectively demonstrated by rearing and releasing parasites.

- In the western coastal States, the western pine shoot borer, a pest of young pine, is being effectively controlled by a synthetic sex attractant which disrupts mating and reduces the overall infestation level.

- In the west, continued releases of introduced parasites of the larch casebearer are resulting in the natural control of this pest over much of its range in Idaho and Oregon.

- The Douglas-fir tussock moth, another important defoliator in the west, was successfully treated with a natural virus in British Columbia in 1981 after rising populations were detected with an early warning system developed through the Expanded Douglas-fir Tussock Moth Program. The early warning system is also being used in our western States and the virus is in production for use against future outbreaks.

- Nationwide, research on nursery diseases has led to modification in nursery practices and integration of nursery activites such as use of cover crops, soil amendments, controlled watering, timely application of pesticides, and soil fumigation. These practices have reduced losses to less than 25 percent in some nurseries.

- In the east, research on gypsy moth has provided many tools for use against outbreaks of this pest and research on new or refinement of existing techniques is continuing. Since 1975, research has provided:

- A natural virus for control (Gypchek^R)
- An insect growth regulator (Dimilin^R)
- A bacterium for control (B.t.)
- A carbamate insecticide (Carbaryl^R)
- An organophosphate insecticide (Dylox^R)
- Several parasites evaluated for suppression
- A sex pheromone for detecting and delimiting gypsy moth populations
- A sterile male release technique now being field tested
- Hazard-rating system for classifying stand susceptibility

All of these techniques have been demonstrated to reduce gypsy moth populations, but to be most effective, they must be integrated into a pest management system. Research on integration has not yet been completed but a preliminary integrated pest management system is now ready for validation and demonstration.

Question: Why haven't we been able to develop technology for preventing the kind of outbreaks now being experienced?

Answer: As pointed out above, we have made considerable progress in developing technology to prevent outbreaks by several pest species. Additionally, we may be able to demonstrate ways to prevent outbreaks of two of our most important bark beetle pests, the southern pine beetle and the mountain pine beetle in the very near future.

Almost without exception, being able to prevent outbreaks required an in-depth understanding of the ecology and biology of the pest species including an understanding of the factors that regulate population density. Only with this knowledge, is it possible to take steps to manage forest conditions that contribute to outbreaks.

In the case of the gypsy moth, we are dealing with an insect species introduced into this country without its natural enemies. Outbreaks are much more likely to occur in the absence of regulation by natural enemies. There are also extensive areas of susceptible forest type that provide an abundant and preferred food source that can sustain high density populations. A fully integrated pest management system would need to be implemented to help assure the prevention of outbreaks. A preliminary system is ready for validation and demonstration. The gypsy moth is also still in the "invasion" process. The advancing front, that part of the population that is moving into areas where it has not occured before, is not a true outbreak but an invasion and it is similar to problems caused by the expanding range of the introduced fire ant in the South. One way to solve this dilemma is to shortcut the research method by moving beyond the advancing front and establishing silvicultural demonstration areas which could serve to reduce damage or even prevent outbreaks.

Unfortunately, the advance of gypsy moth is compounded by its ability to "hitch-hike" to areas far beyond the front. We are currently evaluating research opportunities in new areas in advance of the front.

Question: What is the current focus of this activity?

Answer: The current focus of insect and disease research is to provide the fundamental knowledge and methods for development of integrated pest management systems for our major pest species.

This focus will provide resource managers with decision support systems that they can use to:

- Hazard rate susceptible forest stands.
- Monitor population trends of pest species in high-hazard stands.
- Evaluate, through computer simulation, which management strategies will be most effective in reducing losses (cost effectiveness in context of management objectives) with minimal environmental disturbance.
- Implement prevention or suppression programs to achieve management objectives.

The basic thrust of integrated pest management is to minimize losses and maximize productivity for resources that are of economic significance. Where we lack the knowledge to prevent losses, we must have a capability for direct action to reduce an expanding pest population before it can cause extensive damage.

Question: Provide for the record a breakdown of this activity, for 1981, 1982, and 1983, showing funding for each pest and disease.

Answer: The following tables display the information requested on insect and disease research for the years indicated.

FOREST INSECT RESEARCH FUNDING

Categories	Thousand Dollars 1/ 1981	 1982	 1983 2/
Spruce budworms	1,504	1,558	1,626
Cone and seed insects	952	1,131	922
Southern pine beetle	852	721	696
Insects of wood products	826	805	748
Regeneration insects	727	459	613
Gypsy moth	680	772	819
Western pine beetle	573	651	509
Misc. hardwood insects	526	281	173
Insecticide toxicology and environmental safety	511	202	321
Mountain pine beetle	501	408	584
Insects of high-value plantings	494	484	521
Misc. conifer insects	476	441	336
Other bark beetles	397	241	240
Douglas-fir tussock moth	380	487	535
Urban forest pests	324	884	766
Hardwood borers	189	195	202
Other	82	237	167
	9,994	9,957	9,778
CANUSA 3/	3,763	2,871	2,636
Southern Pine Beetle Program	1,252	1,436	1,409
Transfer to USDA, Science and Education	1,080	600	475
Total	6,095	4,907	4,520
GRAND TOTAL	16,089	14,864	14,298

1/ Dollar figures are appropriation level; for 1982 and 1983, GA is excluded.

2/ Estimated.

3/ Canada/United States Spruce Budworms Program

FOREST DISEASE RESEARCH FUNDING

Categories	Thousand Dollars 1/ 1981	1982	19832/
Mycorrhizae	792	712	649
Dutch elm disease	694	124	118
Fusiform rust	675	580	606
Canker diseases	597	492	572
Air pollution	567	535	494
Dwarf mistletoes	484	368	194
Decay in trees	432	418	400
Diseases of high-value plantings	415	374	417
Decay of wood products	414	387	433
Regeneration diseases	405	265	295
Nursery diseases	3/	191	159
Root diseases	356	413	299
Diebacks and declines	353	293	148
Mycology	318	228	250
Foliar diseases	284	291	252
Other	279	—	—
Beech bark disease	152	156	166
White pine blister	122	130	147
	7,339	5,957	5,599

1 Dollar figures are appropriation level; for 1982 and 1983, GA is excluded.

2/ Estimated.

3/ Nursery diseases research was included with regeneration disease in 1981.

Your request for renewable resources economics research is $4.3 million, a reduction of $0.6 million. This activity is the lowest-funded, compared to RPA levels, of all your research (42%); yet the July 1981 report found economics research most deserved increased funding.

Question: Why do you assign the lowest priority to this activity?

Answer: The proposed reduction for renewable resources economics research is in line with overall reduction in the Forest Service research program. It is true that the funding for this activity has been low compared to other activities, but this reflects funds historically appropriated to this activity.

Question: What is it aimed at accomplishing?

Answer: Research in forestry economics provides economic and financial analysis of forest and rangeland management practices and forest product distribution systems. Specifically, research is conducted to:

1. provide forest owners and managers with economic techniques and information for evaluating management and protection alternatives

2. supply forest managers with concepts and procedures for evaluating multiple output tradeoffs on public and private lands

3. analyze present and future forest product demands, values and trade patterns

4. evaluate the feasiblity of energy product and processing technology for wood

Question: How are the results used?

Answer: Forest economics research provides input into policy and management decisions at the local, regional, and national levels in both the public and private sectors. Examples include: gypsy moth risk rating for timber management decisions; timber supply-demand projections for national assessments; multiple use models for simulating management decisions and their ecologic and economic impacts; and analysis of the economic feasibility of press-drying paper operations.

Surface environment and mining is reduced $0.5 million, to $1.3 million.

Question: Why are you focusing the decrease on revegetation work in So. Dakota, New Mexico, and Montana, while continuing similar work in Idaho, Utah, Nevada, and Appalachia?

Answer: The type and magnitude of surface mining activity varies greatly throughout the country. Likewise, the complexity of problems and degree of research progress varies from location to location. In Montana, for example, much of the mining activity relates to coal and we have made good progress in developing the needed technology to revegetate these types of areas. In other areas we are dealing with more complicated problems and several mineral developments, some of which we have just inititated work. For example, research is just beginning on oil shale in Utah. The hard rock mines at high elevations with short growing seasons and very fragile environments are a problem requiring considerable research.

Forest watershed management research is reduced $1.5 million, to $8.2 million.

Question: Why did you select the 6 states indicated (Ark., Miss., Fla., Ariz., Wash., and Hawaii) for reductions relating to consequences of land management on forest and range watersheds?

Answer: When making adjustments in our watershed management program, we reduced or terminated those activities which were nearing completion, were at a point where they could be continued at a lower level of effort, or were yielding research findings considered to be of lower priority than other watershed management activities.

You are requesting $8.0 million for wildlife habitat research, a decrease of $1.5 million; and $1.9 million for recreation research, a decrease of $0.3 million.

Question: The July 1981 report cited these two programs as research areas with inadequate funding relative to the land management funding for these activities. Do you agree with that assessment?

Answer: Yes, research in these two areas is relatively small in relation to the size of the complex land management programs. However, the FY 1983 budget reflects overall research priorities and includes the most cost effective research opportunities.

Question: How do you use the results of the recreation research activity.

Answer: Results of recreation research contribute technology to improve efficiency of recreation resource management without impacting forest resource productivity. Recreation research provides technology to support recreation management on 713 million acres of federal land and 740 million acres of private land. Federal lands alone provide 600 million visitor-days of recreation annually, almost forty percent of this use is on National Forests. Overall demand for outdoor recreation will increase 30 percent by the year 2000. Much of the technology needed to meet this demand will be provided by Forest Service recreation research.

Research is needed to plan for an adequate supply of recreation resources to meet changing demands. As these demands change, new problems will emerge regarding protection of scarce resources and interaction among competing land uses.

Specific examples of the use of Forest Service recreation research include:

1. Research developed an issued permit system now used in numerous western forests and Glacier National Park which provides information useful in the development of wilderness management plans.

2. The problem of how to manage wilderness, so as to protect the fragile natural attractions and maintain visitor experiences are being met with "simulation models" and "carrying-capacity" research. A use redistribution techinque involving better information to the user is being applied by National Forest managers in Montana and the Boundary Waters Canoe Area of Minnesota. The simulation model is being used by both the Forest Service and National Park Service in Colorado as well as by a number of universities for teaching.

3. In New England, a photo technique has been developed as a method of analysis for determining durability of different types of vegetation to intensity of hiker and camper use. Findings of this research will be used by the Forest Service, State of Maine and the Nature Conservancy to designate relatively hardy sites for trail and camping areas.

4. Management techniques developed by research for composting human waste, monitoring use levels and revealing dispersed camping opportunities to hikers are being applied to several natural forests and parks in the East.

5. Researchers in the eastern U.S. developed a quality control assessment methodology to monitor recreation visitor satisfaction. This is used by numerous State, Federal and private campgrounds to evaluate recreation quality control.

6. Results of a National River Recreation Study are being used by the Forest Service, BLM, National Park Service, Tennessee Valley Authority and at least two states to develop management plans for a number of rivers.

7. Wilderness Area Travel Simulation models developed by recreation research has been used to manage the distribution of camping use in both the Minnesota Boundary Area and Canadian Quetico Provincial Park.

Question: Who else performs this type of research?

Answer: Very little recreation research is conducted by other federal agencies. Academic institutions conduct some recreation research, but much of this is done in collaboration with Forest Service scientists. The clientele for Forest Service recreation research includes public land managers at all levels of government, as well as those in the private sector.

Forest Pest Management

You are requesting $1.2 million for special projects, a decrease of $1.3 million.

Question: Explain what is included in the USDA - National Agricultural Pesticide Impact Assessment Program (NAPIAP).

Answer: Special projects funded under NAPIAP are designed to fill gaps in the knowledge for registered pesticides used in forestry. Primary emphasis is given to filling data gaps for pesticides currently under Rebuttable Presumption Against Registration (RPAR). Important data gaps may exist in the areas of applicator exposure, environmental impact, fate, and persistence, and effects of pesticides on forest growth or yield.

Question: What specific activities, and at what cost will be carried out in 1983?

Answer: We are currently budgeting $450,000 for NAPIAP projects. Of this, about $175,000 will be used to complete the following ongoing studies:

— Movement, fate and environmental impact of copper chromium arsenate and pentachlorophenol in an aquatic ecosystem.

— Fate of pesticides in tree stems used for firewood.

— Growth and yield of loblolly pine regeneration under varying levels of pine stocking and following alternative methods of vegetative control including herbicides.

— Ground application exposure to 2, 4-D applied in the forest.

The remaining funds will be used to initiate studies on: the use of tracers to warn against drift into sensitive areas, levels of herbicides in smoke resulting from prescribed fires; comparison of zinc phosphide and strychnine for prairie dog control; determining the economic effects of forest vegetation management; and risk-hazard analysis of pesticides used in forestry.

In addition three special projects other than NAPIAP will be carried out in 1983. The first project is the continuation of the Douglas-fir tussock moth virus production at a cost of $240,000. The second project is a gypsy moth integrated pest management demonstration project in Maryland costing $432,000. The third project is a gypsy moth technology development and application project costing $126,000.

Question: Specify which special projects will be eliminated as a result of the proposed reduction.

Answer: In 1982, 26 special projects were funded, of which 9 were multiyear projects planned to continue into 1983 or beyond. Three continuing projects will be funded in 1983. The projects being postponed are dwarf mistletoe impact evaluation, spruce budworm loss assessment, gypsy moth impact evaluation and stand risk rating development, demonstrations of sivicultural and other prevention and control strategies for mountain pine beetle in the West and spruce budworms in both the East and West, and a long-term evaluation of the 1979 western spruce budworm project effects on insect populations.

Rural Fire Protection

You are requesting $14.4 million for rural fire prevention and control, an increase of $0.3 million.

Question: How much of the request, in total, will be used for grants to states for performing analyses to "determine economic efficiency of fire protection programs"?

Answer: The Forest Service has specifically planned $300,000 for continuation of the economic analysis of the fire protection program.

Question: When will the studies on this subject be complete?

Answer: The Forest Service has targeted $300,000 in 1983 for continuation of the economic analysis of the fire protection program. These funds will be used to complete the national economic analysis of fire protection on non-Federal wildlands by adding additional sample areas. The funding history for this purpose is; 1980 = $22,000, 1981 = $122,600, 1982 = $235,000.

The Forest Service report will be completed by December 31, 1982. The Forest Service is refining the economic analysis by adding representative areas and by obtaining additional information on resource values and escaped fires for areas already included in the analysis. States will be encouraged to complete an economic analysis of their fire protection programs. The Forest Service objective is to complete all analyses by 1986.

Question: Will such studies result in a reassessment of the Federal role in this program?

Answer: Yes. A reevaluation of the Federal role in fire protection on non-Federal land is underway, and a report will be available in September 1982.

Question: What are your plans for developing the "new program measures" you say will be needed as a result of the emphasis on economic efficiency?

Answer: The Forest Service will identify alternative national program objectives for fire protection of non-Federal lands, and activities for accomplishing these objectives will be identified. A fire program to protect the national interest will be developed following examination of the alternatives.

Question: How is this program distinguished from the Rural Community Fire Protection Program, elsewhere in USDA? How much is budgeted for that program in 1983?

Answer: The Rural Fire Prevention and Control program provides technical and financial assistance at a cost-effective level to States to prevent resource losses on non-Federal rural lands. In contrast, the Rural Community Fire Protection program provides technical and financial assistance to train, organize and equip rural fire departments to protect life and property in rural communities. There are no funds for the Rural Community Fire Protection program in the President's 1983 budget.

Rural Forestry Assistance

You are requesting $12.4 million for rural forestry assistance, a decrease of $4.0 million.

Question: How will this program help to meet the goal of increasing the share of timber supplies from non-industrial private lands from 29% in 1976 to 41% by the year 2030?

Answer: Non-industrial forest landowners are not adequately managing their lands even though economic opportunities are plentiful. Several sources of technical assistance are available including private industry foresters, professional consultants, and State forestry agencies. Through the Rural Forestry Assistance program, the Forest Service provides financial and technical assistance to State forestry agencies. This in turn contributes to the assistance given landowners, and consequently to production of timber and other natural resources on nonindustrial private forest lands.

While not displayed in the Forest Service Budget, private landowners have been given major economic incentives to engage in forest management by Public Law 96-451. The law provides for tax credits and depreciation of reforestation costs. In addition, the Economic Recovery Tax Act of 1981 reduces income and inheritance taxes which would provide additional incentives for private forest landowners.

Question: What is the Federal role in achieving this goal?

Answer: The Federal role is to help assure adequate supplies of forest resources for the Nation by helping the States improve delivery and effectiveness of forestry assistance to nonindustrial private landowners. Leadership and coordination are key elements in the accomplishment of the Federal role.

Question: How will the 1983 budget affect achievement of the goal?

Answer: The FY 1983 budget will contribute to the goal. As intended in the President's economic recovery program, achievement of the goal will depend on greater contributions to production of timber supplies on nonindustrial private lands from States, local governments, and private interests. The new legislation referred to above will encourage private forest landowners to practice forest management which will also contribute to this goal.

Question: What funding level is requested for the FIP program in 1983?

Answer: No specific amount is requested for the Forestry Incentives Program (FIP) in FY 1983. The request for Agricultural Stabilization and Conservation Service cost-share programs merges FIP with the Agricultural Conservation, Waterbank, and Emergency Conservation Programs at a total of $56 million. Under this approach, funds will be allocated to States as block grants, and State and County Committees will determine the distribution for various practices. If this distribution conforms to recent program proportions, the estimated total for FIP will be about $3.1 million.

Question: What is the 1982 funding and 1983 request for all of the related programs discussed in your justification (Forestry Incentives Program, Agricultural Conservation Program, and relevant portions of the Soil Conservation Service, Extension Service, Agricultural Stablization and Conservation Service, and Farmers Home Administration)?

Answer: The 1982 funding and FY 1983 requests for programs in which funds are transferred to the Forest Service (State and Private Forestry) are described below by Agency and program.

Agricultural Stabilization and Conservation Service

Forestry Incentives Program (FIP)

FY 1982- The total appropriation was $12,500,000 of which $1,250,000 was transferred to the Forest Service for program administration and technical assistance.

FY 1983 - In the budget request the Forestry Incentives, Agricultural Conservation, Waterbank, and Emergency Conservation programs are merged into a total of $56,000,000. Under this merging approach, the funds will be allocated to States as a block grant, and State and County Committees will determine use of the funds. If this distribution is consistent with past program proportions, about $3,100,00 total will be applied to forestry incentives.

Agricultural Conservation Program (ACP)

FY 1982 - The total appropriation was $190,000,000 of which $1,900,000 was transferred to the Forest Service for program administration and technical assistance for forestry practices. The amount applied to forestry cost-sharing cannot be determined yet. This depends on the cost-share distributions by State and County Committees, which is continuing.

FY 1983 - As previously explained the request for ACP has been merged with other programs at a total of $56,000,000. If the distribution of this total is consistent with past program proportions, the Forest Service share for program administration and technical assistance for the forestry practices of ACP would be about $520,000.

Soil Conservation Service

River Basin Surveys and Investigations

FY 1982 - The total program appropriation was $15,500,00. The amount transferred to the Forest Service was $1,484,000.

FY 1983 - The total program request is $16,743,000. The estimated transfer to the Forest service is $1,630,000.

Watershed Planning

FY 1982 - The total program appropriation was $8,690,000. The amount transferred to the Forest Service was $294,000.

FY 1983 - The total program request is $9,152,000. The estimated transfer to the Forest Service is $304,000.

Watershed and Flood Prevention Operations

FY 1982 - The total program appropriation was $192,045,000. The amount transferred to the Forest Service was $4,779,000.

FY 1983 - The total program request is $117,721,000. The estimated transfer to the Forest Service is $2,748,000.

Rural Conservation and Development

FY 1982 - The total program appropriation was $26,000,000. The amount transferred to the Forest Service was $722,000.

FY 1983 - The total program request is $10,312,000. None of this is planned for transfer to the Forest Service.

Farmers Home Administration

Rural Community Fire Protection

FY 1982 - The total program appropriation was $3,250,000 all of which was transferred to the Forest Service.

FY 1983 - No funds are requested for this program.

Urban Forestry Assistance

You are requesting no funding for urban forestry assistance.

Question: How do you distinguish between the Federal role in rural forestry assistance and urban forestry assistance?

Answer: The Federal role in both programs involves leadership and coordination in assisting States to contribute to better forest management. In Rural Forestry Assistance this cooperative effort is directed to improved productivity from nonindustrial private forest lands which constitute 58 percent of the Nation's commercial forest land. Although Urban Forestry Assistance contributes to protection and production of the various renewable natural resources, its primary objective is improvement of urban and community environments.

Overall budget constraints require careful consideration of respective responsibilities for cooperative programs. Our conclusion is that the Federal responsibility is greater in the Rural Forestry Assistance program with its orientation to natural resource production than in the Urban Forestry Assistance program. Consequently, Urban Forestry Assistance receives lower priority within budget limitations and is not included in the President's Budget. State and local governments and private interests should assume greater responsibility for urban forestry in support of the President's economic recovery program. If Federal financial support is essential for urban forestry in some States, the State and local governments have opportunity to seek funds under other Federal programs and authorities, e.g., Community Development Block Grants from the Department of Housing and Urban Development.

Question: What are the total populations served under the rural forestry programs?

Answer: Ultimately the entire Nation benefits from the wood and wood-based products derived from nonindustrial private forests. The Rural Forestry Assistance program contributes to the production of these products.

Studies indicate that there are 7.7 million owners of private woodland. About 5.5 million own tracts less than ten acres in size. Technical assistance is targeted primarily to the 2.2 million nonindustrial private forest owners with more than ten acres, where the public investment is most cost effective. The actual number of landowners assisted in FY 1981, for example, was 164,279.

Question: What are the total populations served under urban forestry?

Answer: There is no record of the population served by the Urban Forestry Assistance program. According to the Census Bureau, the Nation has 20,000 urban areas. These contain 74 percent of the population and all eligible for assistance.

Typically, the number of urban areas assisted each year exceeds 3,000. In general, the most active urban and community forestry programs are in the most populous States.

Question: How much funding was contributed in 1981 to these projects from non-Federal sources?

Answer: An estimate of the non-Federal funding contributions to Urban Forestry Assistance in FY 1981 is $3.2 million. Precise records are not kept regarding the non-federal contributions to Urban Forestry Assistance because the consoliodated payments concept authorized in the Cooperative Forestry Assistance Act of 1978 allows States to match federal funds on a total grant basis rather than on an individual program basis. Those states that do not use consolidated payments must provide non-Federal funding at least equal to the amount of the Federal grant. Some States with highly progressive urban forestry programs significantly exceed the federal grants.

Question: What are specific accomplishments of the program?

Answer: In FY 1981, all 50 States, Puerto Rico, the Virgin Islands, Guam, and the District of Columbia participated in the Urban Forestry Assistance program, providing 190 person years of technical assistance to 3,547 cities and communities. Assistance is directed primarily to zoning commissions, developers, and city officials. It is designed to improve the management and productivity of existing urban and community forests and to protect and preserve existing forest land during urban development.

Question: What is your assessment as to what portion of these projects will continue without Federal support?

Answer: Twenty-two states have indicated that their response will not be sufficient to continue urban and community forestry programs at current levels. The remaining States will provide the funding necessary to continue their programs.

Question: How important is it that they continue?

Answer: Individual States must determine their own program priorities and it seems likely that most will direct the required amount of State funds to urban forestry to provide some level of technical assitance.

Insect Suppression Activities

Question: What are the annual losses due to pests in both the industrial and non-industrial private forests, and state forests, in terms of both timber volume and value?

Answer: It is estimated that the annual unsalvaged timber mortality due to insects and diseases is 365 million cubic feet on industrial lands, 1.1 billion cubic feet on nonindustrial private lands, and less than 82 million cubic feet on State forest land.

Assuming that this unsalvaged mortality occurred in timber that would have been harvested that year had it not been killed, the value of the timber would be approximately $185 million on industrial land, $573 million on nonindustrial private land, and less than $43 million on State forest land.

3.4 million acres of Federal, state, and private lands were treated in 1981.

Question: What is your estimate as to the number of acres that will be treated at the level of your 1983 request?

Answer: The estimated acres that can be treated with the FY 1983 request on Federal and State and private lands is approximately 540,000.

Question: How does this compare with estimated total acreage requiring treatment in both 1982 and 1983?

Answer: Although there may be little relationship between total acres of suppression needed in one year compared to the previous year, the planned 1983 suppression acreage represents about 19 percent of the acres treated in 1982 and about 18 percent of the estimated acreage requested to be treated in 1983.

Land Management Planning

You indicate that $22.5 million of this account will be used for land management planning, which must be completed by 1985.

Question: Have you changed your planning procedures in the last year, or are changes being considered? If so, what do they involve, particularly with regard to public involvement?

Answer: The existing planning regulations for the 190 million acre National Forest System were adopted by the Secretary in September 1979. President Reagan's Task Force on Regulatory Relief identified the National Forest Management Act (NFMA) regulations as among those to be reviewed for possible modification in an effort to simplify government regulations. As a result of this review, the Secretary has proposed changes in the 1979 regulations to streamline the land management planning process. The proposed revisions were published in Federal Register Volume 46, No. 35 on February 22, 1982, with a 60-day public comment period.

The proposed regulations reflect experience gained in implementing the 1979 regulations. We identified several areas where the planning process could be improved. The revisions proposed will clarify and simplify planning procedures and thereby improve planning efficiency. There is no intent to significantly change what is now being accomplished on-the-ground. Basically, the revisions simply reduce the complexity, jargon, and redundancy in the 1979 regulations.

There is a serious misinterpretation of proposed Section 219.6 with respect to public participation in the planning process. A full and open public participation process remains possible under the proposed revisions. The regulations implicitly state public participation is to be encouraged throughout the planning process. In addition, the Forest Service is guided by the requirements of the manual on public participation (FSM 1600) and National Environmental Policy Act (NEPA) guidelines. It is true that a great deal of the language was deleted in the new version, but much of the deleted material was redundant, unnecessary or the concept was covered elsewhere, such as the National Environmental Policy Act/Council of Environmental Quality (NEPA/CEQ) guidelines.

There have been accusations that the proposed Section 219.6 (d) (quoted below) would allow the Forest Service to withhold information from the public. This section was written to explicitly allow certain work in development stages to proceed efficiently without major disruption. Based on experience gained during implementation of the 1979 regulations, the Interdisciplinary Team must be able to proceed with the planning process without continual disruption. Section 219.6(d) permits most requests to be honored with respect to informal completed planning documents. Those requests permitted under Freedom of Information Act must be honored.

> Section 219.6(d) - Requests by the public to discuss the progress of the planning or to review informal planning documents shall normally be honored. The responsible line officer may deny part or all of a request if complying with the request would unreasonably burden, inhibit, or interfere with the planning or decisionmaking process, and if that denial is permitted under the Freedom of Information Act.

The Forest Service is now evaluating public comment on the proposed changes. Although there has been no weakening of the public participation provisions, it is evident from the comments that the changes are not perceived in that manner. Therefore, the revisions will be strengthened to convey the proper interpretation.

Question: What kind of "streamlining" have you undertaken?

Answer: The proposed regulations have been designed to more effectively describe a process or procedure for arriving at decisions. The streamlining included reducing complexity, deleting jargon and deleting unnecessary language or language which is repeated elsewhere in the regulations. The regulations have been shortened and philosophical language has been deleted. Many parts of the regulations were found to be effective and efficient in their present form and therefore, remain essentially unchanged.

The proposed regulations require that the plan document contain only essential elements necessary for understanding land allocation decisions, scheduling, and resource management direction. In addition, the format of the Environmental Impact Statement has been revised to conform strictly to the CEQ requirements. By adhering to the CEQ format, a more concise document for use by both the decisionmaker and public will be produced. There is no intent to significantly change what is now being accomplished "on the ground."

Question: How is "departure" policy treated in the planning process?

Answer: Under the current regulations, departures will be considered when any of the following three conditions exist:

1. High mortality losses from any cause can be significantly reduced or prevented or forest age-class distribution can be improved, facilitating future sustained yield management.

2. Implementation of the corresponding sale schedule would cause a substantial adverse impact upon a community in the

economic area in which the forest is located.

3. None of the other alternatives considered provides a sale schedule that achieves the goals of the Resources Planning Act Recommended Program.

The fourth criterion in the proposed revisions would provide for consideration of a departure alternative when it is reasonable to expect that net public benefits would be increased. These criteria are merely "triggers" to look at departure alternatives. They are not mandatory requirements to make a departure. The fourth criteria was added to insure that an opportunity to increase net public benefit would not be overlooked simply because none of the original conditions apply. NEPA requires that such alternatives should be made known to the decisionmaker, the public, and the Congress.

Under the four conditions listed in proposed Section 219.13 (d) (iii), departure alternatives should be assessed along with others that do not depart. To insure that significant increases in net public benefits are not being overlooked, under Forest Service Manual requirements, forests evaluate a departure from the base sale schedule for each alternative under consideration as the preferred alternative. The decision to select a departure alternative for the plan would depend upon the responsible officer's judgment as to which alternative results in the greatest public benefit.

The regulation revisions would also delete the current requirement that forest plans recommending a departure from evenflow policy be approved by the Chief of the Forest Serivce. The proposed regulation will place this responsibility with the regional forester so the approval process will be uniform for all forest plans, rather than leaving the Secretary as the first and only authority to whom departures could be appealed.

Question: What changes have you made, or are you considering, with regard to wildlife habitat protection?

Answer: The original intent of the August 1979, regulations was that habitat objectives would be established in the forest plan, and when implemented would then be managed in a manner consistent with the plan. However, the original wording was unclear leaving the impression that alterations of the habitat could not occur and that the existing habitat was to be maintained regardless of the plan's objectives or the costs. Concern has been expressed that the proposed revisions would produce management plans that are designed to increase timber management in a way that would be detrimental to population viability. This is not the case. The proposed regulations still require that all alternatives provide that habitat be managed to maintain viable populations of existing native vertebrate species in the planning area. But the revisions make it clear that the management direction is to be established in the plan, and not in the regulation, thus providing for flexibility in managing the land area for all resource values. Some alternatives may provide for more habitat for selected species than now exists on the planning area and other alternatives may provide for less. But all of the alternatives must provide for habitat to maintain a viable population.

Question: Do non-market, non-commodity resources receive equal emphasis to market resources in the planning process? If so, how do you ensure that?

Answer: Market and nonmarket resources receive equal consideration in the planning process. This equal consideration is assured because NFMA Section 6 (k) states that physical and other pertinent factors shall be considered to the extent feasible. Section 6 (g)(3) of the Act provides definite direction to insure that timber will be harvested only where "the harvesting schedule to be used is not selected primarily because it will give the greatest dollar return or the greatest unit output of timber."

The economic analysis provides a valuable integration tool that helps us understand the relative merits of plans that embody a host of varied and interacting outputs and inputs. However, economic evaluations will be used as only one of several criteria used to evaluate and select an alternative. Environmental and social criteria will be given equal weight. The value of the economic evaluations lies in the information provided to the public and the decisonmaker concerning the economic efficiency of producing those outputs that can be valued, and the opportuntiy costs of those that cannot.

Minerals Area Management

Your request for minerals is $25.0 million, an increase of $5.6 million.

Question: You completed 25,000 applications or operating plan cases in 1981, 6,000 more than your estimate of 19,000. How was the increase accomplished?

Answer: National emphasis was placed on adequate and timely processing of lease applications and operating plans. Also, the quantity of completed applications/operating plan cases were included in the regional forester's performance ratings. These methods proved to be adequate incentives in accomplishing the increases.

Question: Describe the specific changes you have made in your procedures, particularly as they relate to environmental requirements, to "streamline" such processing?

Answer: The procedures during FY 1981 basically remained the same. However, there was increased emphasis on better management of the leasing process, including providing increased training for employees associated with it. This was coupled with an emphasis to sharpen the focus of environmental analyses.

Question: What are you not doing now that you did in the past?

Answer: The Agency is beginning the testing of the use of the "contingent right stipulation" in the end of FY 1982 and the first half of FY 1983. The "contingent right stipulation," in effect, defers environmental analyses until the leasee indicates that they are going to explore or develop the area covered by the lease. This should reduce the number of environmental assessments or environmental impact statements significantly. This is because only an estimated 10 percent of all leases are actually explored and an estimated two percent are developed. The "contingent right stipulation" is not to be used as a method to circumvent the NEPA process.

Question: How many applications and drilling requests in wilderness did you approve in 1981? To date in 1982? How many are pending?

Answer: There were five lease applications in wilderness approved through December 18, 1981. There have been no additional approvals in 1982. There have been no drilling requests approved in either 1981 or 1982. Our present statistical data indicates there were 1,011 pending lease applications in wilderness as of December 14, 1981.

Question: How much of your increased workload (+6,000 completions) and costs in 1983 do you estimate are related to wilderness?

Answer: As of December 14, 1981, there were 1,011 pending lease applications in wilderness areas. There are an estimated $800,000 planned in the FY 1983 budget to complete those pending lease applications or any possible new ones received.

The increase for leasable minerals is $2.2 million, due to increased costs for operating plan administration, as compared to lease application processing.

Question: Why is operating plan administration more expensive than application processing?

Answer: The processing of lease applications may involve the completion of an environmental assessment or environmental impact statement concerning the lease application or, if the new "contingent right stipulation" is used, only submitting a recommended approval or disapproval to the Bureau of Land Management. Operating plan administration involves considerable coordination among various staff groups, Federal agencies, and State agencies to (1) review proposed operating plans and develop needed mitigative measures for surface resource protection, and (2) assure that appropriate protection is being carried out for all surface resources during mineral activities.

For locatable minerals, you are requesting an increase of $2.7 million.

Question: What is the basis for your estimate that you will process 7,011 operating plans, almost double the 1982 level of 3,647?

Answer: In response to a growing national concern about our dependence on foreign sources for a number of strategic minerals, increasing prices, and other economic factors, the locatable minerals workload has been increasing.

Question: How many are currently pending for action?

Answer: Based on the regional data and information, the estimated 7,011 operating plans are expected to be received and completed in FY 1983. Our present data does not indicate that there are any operating plans currently pending.

Question: Why will unit costs decrease for this program. while they are increasing for leasable minerals?

Answer: The leasable minerals unit costs are increasing due to a larger percentage of operating plan administration as compared to lease application processing. The locatable minerals unit costs are decreasing due to a higher percentage of small operating plans as compared to previous years.

The increase for common variety minerals is $0.8 million.

Question: Why are you projecting a 31% increase in workload, when the trend has been 11% per year since 1979, and expected to continue?

Answer: The trend has been an average of about 11 percent in workload per year since FY 1979. This trend is expected to continue, but percentage increases in given years may vary. The 31 percent increase in workload from 1982 to 1983 is based on regional projections in response to increased demands for the resource.

Question: How much of this program is tied to Forest Service internal needs?

Answer: It is estimated that as high as 75 percent of this program is tied to internal needs, mostly for Forest Service roads.

Question: How do you determine the level of need you will have to meet?

Answer: The program is developed from the regional data in response to timber, recreation, and other resource needs for common variety minerals. It also includes projected outside needs.

Land Management

You are reducing land exchange and adjustment by $1.0 million. You cite a number of benefits to the program, mainly in cost savings related to maintenance and trespass.

Question: Considering the benefits, why are you reducing this activity?

Answer: With the need to reduce federal spending, investments were deferred to the extent practical until the economy recovers. The FY 1983 Budget is sufficient to take advantage of the most cost effective land exchange opportunities. The lower priority cases can be deferred without a major reduction in long term cost savings associated with this program.

Question: Do you have an estimate of cost savings that could result from maintaining the program at the 1982 level?

Answer: Land exchange and adjustment can reduce some of the costs associated with land line location, maintenance, special use permits, rights-of-way and trespass cases. It is difficult to estimate the savings that would come from a land exchange and adjustment program funded at the FY 1982 level because many of the savings would occur in future years. This makes it difficult to discount the savings to a present value. It is important to recognize that the savings from a larger land exchange program need to be weighed against the returns from other public expenditures and other public policies such as reducing Federal expenditures and the Federal workforce. The FY 1983 Budget represents the best allocation of expenditures for the Forest Service consistent with a national policy of constrained spending.

Question: What is the extent of the trespass and title claim situation? Are you dealing with a backlog?

Answer: In 1977, we estimated that there was a backlog of 50,000 trespass and title claims cases to be resolved. During the period 1976 to 1980, the United States incurred 2,000 new cases a year. In 1980 and 1981, we estimated that new cases were reduced to about 500 a year due to:

1. Directing our field offices to place more emphasis on prevention of new cases.

2. Field units working closely with developers and surveyors.

3. Forest Supervisors coordinating with county zoning and planning commissioners.

The currently estimated backlog is 61,000 cases.

Question: What are the consequences of not dealing with these cases?

Answer: Private landowners would continue to use public lands in trespass without having to pay for it. Generally, public use declines on lands which are claimed or occupied by individuals.

You discuss two projects — a computerized system of land records, and the joint land transfer program with BLM — that were funded in 1982 from "benefitting functions" that will not be continued in 1983.

Question: What were the benefitting functions that contributed to these projects?

Answer: The benefitting functions are primarily range, timber, and minerals. These are the functions making the most use of land status records at this time.

Question: Did they fall within the reprogramming guidelines?

Answer: Reprogramming was not needed because range, timber, and minerals benefit directly from these two projects.

Question: Why are you not proceeding with the projects in 1983? What is the balance required in each case?

Answer: In FY 1982 a broad scope analysis is being done to identify high priority areas for consideration under the Forest

Service/ Bureau of Land Management transfer program. The next step is to prepare detailed studies and transfer reports on specific areas. These can be scheduled over time as priorities and funding permit. The studies are being deferred in FY 1983 in order to hold down Federal spending and to finance higher priority work.

There are many elements, or subsystems in the computerized land record system. One subsystem, Land Areas Report (LARS), was completed 3 years ago. The second subsystem, Landownership Status (LOS), is essentially complete and we will start implementation at the end of this fiscal year.

The Land Use Reporting (LUR) subsystem will be 40 percent complete at the end of this year. The Land East-West (LEW) is about 50 percent complete. The Tri-L subsystem is about 10 percent complete. The following subsystems are about 5 percent complete:

Water Uses, Rights, and Requirements (WURR)
Riparian and Acquired Water Areas (RAWA)
Mineral and Energy and Encumbrance (MEE)

There are a few small subsystems that we have not started. They are specialized land use restriction or encumbrance areas for which little information is available. They are:

National Register of Historic Sites
Geological Sites
Cultural Resources Sites

We will not lose the efforts to date in the development of these subsystems. They can be continued later if justified by future needs.

Question: How many other such activities are funded from "benefitting functions?"

Answer: All activities are funded by "benefitting functions." The Forest Service operates under the "direct financing principle". This principle is applicable to the salaries of employees and other services which can be and are directly identified with the benefitting appropriations and functions. Financing of these expenses are made direct to benefitting appropriations.

Question: Why is this preferable to requesting funds directly for these activities?

Answer: In cases like those cited above, existing functions will directly benefit from the outcome of the project. The direct benefit to each function is calculated and determines each functions share of the cost.

This method of funding is preferable because it permits each function to budget and account for its particular needs. It also reduces the need to budget and account for inumerable line items.

Your request for special uses (the permit program) is $6.4 million, a decrease of $1.2 million.

Question: Why are you deferring fee reviews, when you estimate it will result in a loss of $1.0 million in receipts in 1984 and beyond?

Answer: We will give priority to the collection of existing user fees and administration of those permits involving construction of new facilities. Similarly, special-use applications important for public health, safety, and welfare and the achievement of National energy and mineral dependence will be given priority for processing. Fee reviews will be made on the most cost-effective permits.

Question: What would be the cost of capturing those receipts by performing the additional 7500 fee reviews in 1983?

Answer: An additional $2 million would provide for full administration of existing permits. However, this involves some lower priority work which should be deferred because of the need to fund higher priority work within existing spending constraints.

Question: How do you define "significant" delay in processing permit applications?

Answer: A significant delay is a deferral of the review process for 4 months or more after receipt of the completed application.

Question: What does administration of existing permits involve?

Answer: The administration of existing permits involves maintenance of permit records, the collection of annual fees, fee reviews and adjustments as scheduled in the permit, inspection to ensure compliance with provisions of the permit, enforcement of permit provisions, terminations, and transfer of permits upon change of ownership.

Question: How do you define "minimum level administration"?

Answer: Minimum level administration involves maintenance of permit records, the collection of user fees, inspection of permits when complaints are made or when there are obvious problems, terminations, and transfers of permits upon change of ownership. Permit violations involving public health and safety and significant degradation of the environment are enforced.

Question: What level of administration will you provide on the balance (23%) of existing permits?

Answer: These permits will receive full administration.

Question: How much of the minerals budget will be allocated to processing of special use applications for mineral activities?

Answer: We plan to use $625,000 for this activity in FY 1983.

Question: Why are you separating this function from the rest of special uses?

Answer: Over the past several years, there has been a dramatic increase in the number of special-use applications related to mineral and energy developments on the National Forest System lands. During this period, the budget for special uses has not kept pace with the increased demand for these developments. We believe this added impact on special uses should be funded as support from the mineral budget item. This will assure that adequate funds are available to the Forest Service for review and processing of special-use applications associated with mineral development, as well as review of development and operating plans.

Your request for geometronics is $5.4 million, a $1.0 million decrease.

Question: Define primary and secondary base maps and how they are used.

Answer:

Primary Base Maps

Definition - These are the master 1:24,000 scale, 7½ minute format quadrangle maps which contain basic map data such as culture contours, drainage, open water, land net, Forest Service land status, and Forest Service administrative sites.

Uses - This is the primary Forest Service administrative map and is the base from which most other Forest Service map products are made. It is the inventory base for thematic information such as resource inventories, fire and recreation facilities, transportation systems, soil and geologic data, etc.

Secondary Base Maps

Definition - These are general administrative maps produced at a scale of ½ inch to the mile to cover the entire forests or major subdivisions on a single sheet.

Uses - This is the base from which most public use and public sale maps are generated. These maps portray the forest in more general terms and are used to display thematic information that requires a forest-wide perspective for effective use. Map products from this base are normally produced in color.

These two map bases (primary and secondary) provide the base for all forest planning and forest plan displays needed for the National Forest Management Plans.

Question: What is the impact of producing 284 fewer maps in 1983 than 1982?

Answer: Existing maps will be used in lieu of updated maps on an area equivalent to 4 national forests. Major map changes will have to be made by field users by hand on a case by case basis.

Question: What do the contracts for scribing work involve? How many in total are there?

Answer: As background to this question, it is important to understand how scribing fits into the total map making process. The basic steps are:

1) The forest, using recent aerial photography, indicates what revisions are needed on existing maps.

2. Using this "correction guide" and the aerial photography, corrections are accurately placed on an overlay to the existing map using precision stereoplotting equipment. This resulting "compiliation guide" is a pencil manuscript.

3) Using the compilation guide as a reference base, the revisions are then traced and properly symbolized by scribing.

4) The revised layers are edited and then composited to form a new map base using photography techniques.

5) The completed map is then returned to the regional office for distribution to field offices.

The scribing contracts involve the process described under step 3, whereby the contents of the "compilation guide" are scribed onto layers of film for later compositing. This phase of map making is labor-intensive and we utilize these contracts to reduce Federal employment.

We procure these services for about 25 projects a year, including 600 to 700 primary quadrangles and 5 to 10 secondary sheets. This is in addition to photo reproduction for another 400 to 500 quads.

Land Line Location

Your request for land line location is $26.1 million, a $0.3 million increase.

Question: You indicate the greatest benefits per expenditure in this program are from trespass and recreation, followed by minerals and timber. What portion of the 1983 request will go toward resolution of each of these categories of cases? Provide a breakdown for the record.

Answer: Probably less than 10 percent will be used for trespass and recreation activities, or about $1.5 million. Minerals and timber projects will use 90 percent of the funds, which is consistent with the size and character of these programs.

Question: The budget increase actually reflects a decrease in personnel and an increase in contracts. Why is it more efficient to cut personnel and increase contracting?

Answer: It is usually not more efficient to contract. However, because of increased competition among surveyors in the Northwest, we will be getting some bids at a cost less than our costs. A primary factor is the travel and per diem expenses incurred in doing it ourselves.

Question: How does the cost per mile ($4000) compare to prior years? Explain the difference, if any.

Answer: Costs per mile for land line location have increased 7-8 percent per year from $3700 in 1981 to $4300 in 1983. This increase is due entirely to inflation (including pay costs). We anticipate that contract prices will decrease in the future because of increased competition, primarily in the Northwest. Consequently, average costs per mile should be stable for the next few years.

Maintenance of Facilities

You are requesting $13.7 million, an increase of $1.5 million.

Question: Most of the increase is for increased contractual effort. What is the reason for this? What exactly will be accomplished with this increase?

Answer: Some maintenance activities are being reviewed for possible contractual operation under OMB Circular A-76, Review of Commercial/Industrial Activities. For example, in California, some of the larger facilities are now being maintained by contract. We expect that further review will indicate additional areas where contracting will be undertaken.

The increase will also be used to conduct more thorough condition inspections and to abate health and safety hazards and other maintenance deficiencies identified in these reviews. Some of the increase would also go for increasing the energy efficiency of some of our facilities through up-grading heating and cooling systems, adding storm windows, doors, and insulation, and similar energy conservation measures.

Question: How was the backlog of $121 million in maintenance needs, in your 1981 Study, determined?

Answer: The information was compiled by facility managers at the National Forest and Regional levels based upon condition surveys and other related inventories and data.

Question: Are you studying the possibility of consolidating and/or closing down facilities that are underutilized or in poor condition?

Answer: This is an on-going effort. Unit consolidation studies are being undertaken or considered on many units with the goal of making more efficent use of our budget and human resources and closing down unneeded facilities. We are considering a special effort in fiscal year 1984 to assess the need for retention or disposal of buildings and related facilities to reduce the maintenance and operations burden.

Question: Does the estimate of $13 million that will be added to the backlog in 1983 take into account the research closures you are proposing?

Answer: No, research facilties are maintained from benefiting research program funds and are not included in the $13 million.

Question: Why are you proposing to add to the backlog rather than reduce it?

Answer: The budget request reflects the need to reduce Federal expenditures by deferring maintenance of facilities whenever possible. The proposed level of funding will permit correction of most high hazard health and safety deficiencies and some other high priority maintenance work.

Forest Fire Protection

Your request is $150.3 million, an increase of $5.6 million.

Question: Under your analysis system, what would be the funding required for the most efficient fire protection program in 1983?

Answer: According to the "Fire Management Budget Analysis", the most efficient fire protection program would be about $175 million, with general administration excluded.

The President's Budget provides for the most efficient program considering the need to reduce Federal spending and employment. The "Fire Management Budget Analysis" uses an economic efficiency criterion to assist in determining the fire organization mix and budget level. Actual fire severity and, therefore suppression costs and net resource value change may vary significantly from the analytical solution which is based on historical fire information. The President's Budget will allow for an effective fire protection program.

Question: What are the estimated cost increases in suppression and net value change that will result from the requested amount?

Answer: The suppression cost estimated by the Fire Analysis at the most efficient program level is about $80 million and the net resource value change (loss) is about $40 million. Suppression cost estimated for the requested amount is $119 million and the net resource value change (loss) is estimated at $62 million. The increase in suppression costs if the "Fire Management Budget Analysis" is correct would be about $39 million and the increased loss would be about $22 million. However, this estimate is based on historical data and may not reflect the conditions that will exist in 1983.

Your request for fire aviation is $27.3 million, an increase of $2.1 million.

Question: How much of the 1983 request is for non-fire aviation support?

Answer: Very little of the fire aviation budget is for non-fire aviation support and none of the increase is caused by that support. Base salaries of certain key aviation managers are budgeted fully from Forest Fire Protection (FFP) funds as an administrative convenience, even though these managers also provide support in the form of advice and inspection services to non-fire users of aircraft services, in addition to their fire-related assignments. Such expenses are not separately identified. These services constitute only a small proportion of their workload and a much smaller, part of the FFP costs for fire aviation.

Question: Are aviation costs related to other activities also funded under those activities? If so, provide a breakdown of all aviation costs in your budget for 1981, 1982, and 1983.

Answer: Except for aviation management support, aviation costs related to other activities are funded through those other activities.

The costs of those other aviation activities, which include such operations as aerial surveys for insect and disease control, timber sale reconnaissance, aerial photograph and passenger transport, are not identifed or summarized as aviation costs; consequently, they are not available. However, aircraft use records are kept. Of a total of 93,123 hours flown in 1982, 39 percent or 36,179 hours were funded by non-fire activities.

Question: You are planning to fund contracts for 43 air tankers in 1983 at an availability cost of $3.6 million. How did you determine this number was required for 1983?

Answer: The number of airtankers (43) was established in fiscal year 1981 at the beginning of our 3-year contract period and has remained constant throughout the contract period for industry stability. The number 43 was based upon our budget analysis, professional judgment, coordination with cooperators, and a concentrated effort to combine contracts covering two or more bases. Nineteen airtankers are scheduled for two or more bases. For example: A B-26 begins the season March 1st at Knoxville, TN; moves on to Albuquerque, NM May 15, and closes out the season at Missoula, MT from June 12 to September 15. In past years, this would have involved three short term contracts. The 43 airtankers plus those of our cooperators, 22 with the California Department of Forestry and 10 with the Department of Interior, were severely tested during the fall of 1980 when a southern California fire outbreak created one of our largest demands for firefighting resources, including airtankers. The summer of 1981 again was a severe test for the current number of airtankers with numerous fires in Idaho, Nevada, and Montana. Each time that need was met. This combination of factors was convincing evidence that 43 airtankers is the maximum number needed for 1983.

Question: What were use costs related to these air tankers in 1981?

Answer: $10,773,209 was paid by the Forest Service to airtanker contractors in 1981. Of this amount, $3,632,570 was for availability, $7,061,788 was for flight, and the balance of $78,851 for other expenses.

Question: Can you be more specific as to how you will use the increase of $2.1 million?

Answer: We are planning to hold the number of airtankers in 1983 at 43, which is the same level as in 1982, and to stop the long term decline in the number of helicopters which numbered about 80 in 1982. This action involves contract renewals. Current contracts include provisions for escalation of availability payments according to an index which is running about 8 percent. New contracts and rental agreements for other fire aircraft services such as crew transport, fire detection, and smokejumping, are expected to be bid about the same increase over 1982 as airtankers and helicopters.

Forest Firefighting

You are also requesting a firefighting supplemental of $76.6 million.

Question: What is the breakdown of this request? Show actual expenses incurred, estimated amounts to be incurred, and the basis for the estimates, in relation to the five-year average.

Answer: The breakdown of this request is as follows:

	Millions of Dollars
Salaries/Personnel Benefits	35.2
Travel and Transportation	8.2
Rent, Communications & Utilities	.7
Other Services	13.9
Supplies	13.7
Equipment	4.9
Total	76.6

Actual expenses incurred for fiscal years 1977 through 1981:

	Millions of Dollars
FY 1977	150.9
FY 1978	26.1
FY 1979	80.7
FY 1980	64.7
FY 1981	99.1

5 year average = $84.3

Estimate for current year supplementals is based on the last three year average less the amount already appropriated.

Forest Road Maintenance

You are requesting $61.6 million, a decrease of $3.6 million for road maintenance. you state the decrease will delay efforts to reduce overall road expenditures in the long run.

Question: What would be the cost to avoid this effect? What are the related savings?

Answer: The deferral of road maintenance can accelerate the deterioration of road conditions and create the need for early reconstruction in order to keep the road serviceable. To some degree, reconstruction costs represents a "catch up" on maintenance that has been deferred over several years. In 1981, $27.9 million of appropriated funds and $43.4 million of purchaser credit was spent on reconstructing roads to a serviceable standard.

Efforts are being made to reduce road maintenance needs by restricting traffic not necessary for the intended use and closing roads entirely during weather conditions when they are especially susceptible to deterioration.

It is difficult to determine how much of this reconstruction cost could have been avoided by proper maintenance over the life of the road.

Timber Sale Administration and Management

Your request for timber sales is $188.3 million, an increase of $22.7 million, or 14%.

Question: How much is included for the Oregon and California Grant Lands?

Answer: The 1983 President's Budget for the Bureau of Land Management contains $2,950,000 for the Forest Service share to manage the Oregon and California (O&C) lands.

Question: Are additional amounts related to Forest Service management of these lands included elsewhere?

Answer: Yes. In addition to the $2,950,000 mentioned above, the Forest Service also makes funds available for management of the O&C lands as a part of their regular resources management efforts. In FY 1983, it is estimated that this amount will be approximately $6,080,000.

Question: What is the breakdown of Forest Service costs for O & C Grant Land management for 1981, 1982, and 1983, and the source of funds?

Answer:

(Dollars in Thousands)

Source	FY 1981	FY 1982	FY 1983
O&C Funds	3,300	2,109	2,950
Forest Service Funds (Regional Program):			
Timber Sales Administration and Mgt.	1,476	2,514	2,230
Recreation Use	716	220	350
Forest Road Construction	3,538	4,187	3,500
Sub Total	5,730	6,921	6,080
Timber Purchaser Road Construction	7,000	7,000	7,000
Total	16,030	16,030	16,030

You are increasing timber resource inventory planning by $1.2 million.

Question: Why is an increase of 12% needed to accomplish almost the same number of acres of inventory (1393 vs. 1313 in 1982)?

Answer: Information is needed from the timber resource inventory to properly consider the timber resource in regard to the overall land management program on each national forest. Therefore, the inventory design necessary to obtain the proper data is rather complex and costly. Much of the information collected for the timber inventory of work is contracted with private companies and the cost of these contracts has been increasing each year.

Question: What is involved in doing these inventories?

Answer: The first phase of the timber resource inventory is the definition of what type and amount of information is needed about the resource. A plan is then designed to properly secure this information. The second phase is the purchase of the necessary aerial photography of the national forest to be inventoried. Since national forests are inventoried every 10 years, aerial photography is a necessary tool to determine that amount of change in the forest cover since the last inventory.

Aerial photographs are used to provide certain informational attributes of the forest such as acreage of forest cover types, stand size, distribution, etc. This stratification of information is then systematically sampled on the ground to determine specific stand data that can only be measured on the ground such as volumes, number of trees, condition of quality, mortality, and individual tree growth.

Since timber inventory methods are complex, this collected data must be reduced to meaningful statistics through the use of computer programs. This phase has been greatly improved over the past years and has greatly reduced the amount of time needed to complete the analysis of data. The data that is provided for each national forest is used to evaluate the conditon of the timber resource and serves as the basis for long range plan, for land and resource management plans and specific timber management objectives for the timber sales program for that forest.

An increase of $2.9 million is requested for silvicultural examination. Again, approximately the same number of acres will be accomplished in 1983 as in 1982 (6,838 vs. 6,889).

Question: What is the basis for the 12% increase?

Answer: The increased cost for silvicultural examination in fiscal year 1983 is due to less accessible areas being examined, a larger proportion of the areas being intensively examined, and increased contract cost for professional services. In fiscal year 1982, silvicultural examinations were contracted in immediate sale areas and less on surrounding stands for the less accessible areas. A larger portion of the compartments being examined in fiscal year 1983 will be intensively examined for treatment. While some contract bids have decreased, such as, those for tree planting or for unskilled or semi-skilled labor, contract bids for professional services have increased.

Question: What is involved in "more intense stand examination and coordination efforts"?

Answer: The method and intensity of silvicultural examination vary among the regions. Some regions complete only stand examinations or examine those areas planned for silvicultural treatment such as a timber cutting, reforestation, or timber stand improvement. These examinations are intensive in that field plots are taken in the stands to gather specific information to decide on treatments. Other regions make an extensive survey covering a whole compartment which may contain 20 to 50 stands. Only a few of the stands planned for treatment are intensively examined. The planned timber treatments are then coordinated with other resource needs to benefit or minimize adverse impacts on other resources.

Reforestation and Stand Improvement

You are requesting $100.1 million, an increase of $3.2 million. However, you will accomplish 16,000 less acres of reforestation and 20,000 less acres of stand improvement than in 1982.

Question: Why are costs increasing while accomplishments go down?

Answer: Reforestation with appropriated funds is concentrated in areas to eliminate the backlog by FY 1985. The remaining sites to be reforested are less accessible and more difficult sites to plant as each year gets closer to the end of the total backlog. Therefore, the costs of reforestation have been rising each year.

Question: What specifically is the reason for "increased contractual costs" in both activites? What do those contracts involve?

Answer: Reforestation related contracts are for site preparation and hand planting. Timber Stand Improvement contracts are primarily for precommercial thinning and release of plantations or natural regeneration from competing vegetation. These involve the use of manual labor and use of herbicides. These project costs have consistantly increased due to higher labor costs and inflation.

Question: Why is there a decrease of $1.2 million in reforestation salaries and benefits and the increase of $3.0 million in contracts?

Answer: The Forest Service has always encouraged the contracting of reforestation and stand improvement whenever possible. As employment ceilings and the number of seasonal employees continue to be reduced, more of this work will be contracted with private companies.

Question: Last year, you estimated reforestation costs per acre would increase by $20; now you are estimating an additional $46 per acre increase in 1983. Was your 1982 estimate accurate?

Answer: Yes, the 1982 estimate was accurate but the figures cited above are not comparable due to the exclusion of general administration in the 1983 justification material. Also, the $20 is the difference between the 1982 Base and the 1982 President's Budget while the $46 is the difference between the 1982 appropriations and the 1983 President's Budget.

Comparable figures, without general administration, are a $54 per acre increase from 1981 to 1982 ($226 to $280) and a $46 per acre increase from 1982 to 1983 ($280 to $326).

Question: How do you arrive at the 1983 figure?

Answer: The areas planned for reforestation for FY 1983 have been identifed and approved project-by-project on the basis of planting prescriptions. These projects are then aggregated on forest and regional basis to determine the average costs on a national basis.

Question: Is this the maximum program (both reforestation and TSI) you could accomplish in 1983?

Answer: In view of other priorities and the need to hold down Federal spending, this is the maximum program that should be accomplished in FY 1983. The Forest Service will emphasize cost-effectiveness by concentrating on those sites with the highest future growth and highest economic returns. The FY 1983 budget for reforestation and TSI reflects this emphasis.

Question: What would it cost to do the required program level with appropriated funds (220,000 acres of reforestation)?

Answer: At this date, we could not accomplish 220,000 acres of reforestation with appropriated funds. Reforestation must be coordinatied with the number of trees growing in the nurseries for the specific site. The advance site preparation must have also been completed to accomplish such an increase. The cost of any additional acres of reforestation would be much more than the average cost ($326 per acre) that is reflected in the FY 1983 President's budget. Cost-effectiveness is of primary concern in planning and scheduling reforestation work. Priority will be given to sites needing reforestation in order to meet the FY 1983 backlog target and the planting of all nursery stocks.

Question: What are the comparable figures (acres and funds) for TSI?

Answer: The TSI program that will be accomplished with appropriated funds in FY 1983 is 160,000 acres as reflected in the budget. Cost effectiveness is of primary concern and stand improvement work must be concentrated on those areas with the highest potential for economic return. Any addition acres would cost much more than the average cost of $144 per acre as stated in the President's budget. The maximum TSI program that could be accomplished in FY 1983 with appropriated funds is 266,000 acres. The additional 106,000 acres will cost on the average $153 per acre. An increase of $16,218,000 will be needed to accomplish this additional acreage.

Question: Are the decreases in appropriated funds program accomplishments offset by the increases in K-V funds program accomplishments?

Answer: No, K-V funds can only be expended for work on timber sale areas where K-V funds have been collected and K-V collections were available to do additional work.

Question: What is the basis for the estimated increases in the K-V programs?

Answer: The K-V reforestation target increased from 167,000 acres in 1982 to 214,000 acres in FY 1983. The TSI target also increased from 137,000 acres to 142,000 acres. The use of K-V for other resource uses increased $1,500,000 in FY 1983. The size of K-V program is tied to the projected cost of doing the work planned in FY 1983 on the timber sale areas. The projected increase in timber harvest was one factor which was taken into account in estimating the K-V needs in FY 1983.

Your request for nursery and tree improvement operations is $15.2 million, an increase of $0.5 million.

Question: What level of production of seeds and seedlings will this request allow?

Answer: The level of seedling production is not directly related to this line item. Most of the seedlings to be planted in FY 1983 were sown in FY 1981. Most all seedlings are sown and grown through the use of a working capital fund which will be replaced by the purchaser of the trees when planted on a project-by-project basis during FY 1983.

The major portion of this line item supports the genetic tree improvement program including the establishment and maintenance of seed orchards.

Estimated seedling production for FY 1983 is 173 million seedlings.

Question: How does this compare to 1981 and 1982?

Answer: Seedling production was 170 million in FY 1981 and estimated to be 166 million in FY 1982.

Recreation Use

You are requesting $97.9 million for recreation use, an increase of $6.0 million; for recreation management, you are requesting $84.4 million, an increase of $5.0 million, or 6%.

Question: What is the rate of increase you have been experiencing in recreation demand?

Answer: Recreation demand, expressed as Recreation Visitor Days (RVD), has increased at an annual rate of slightly more than 3 percent for the period 1976 through 1981. From 1980 to 1981 the increase was 1.3 percent. This change was primarily due to reduced discretionary travel caused by rapidly rising gasoline prices.

Question: Is this budget sufficient to meet that demand?

Answer: Yes, recreation management funding for 1983 has kept pace with demand.

Question: What is the regional breakdown of RVD's, number of recreation facilities and recreation management funding, for 1981, 1982, and 1983?

Answer: We are providing a statistical summary of Forest Service developed sites by region from our Recreation Information Management (RIM) Center.

A SUMMARY OF FOREST SERVICE DEVELOPED SITES
NUMBER, CAPACITY, AND SIZE AS OF 2/01/82

REGION-ALL FOREST-ALL DISTRICT-ALL

NUMBER OF SITES CLASSIFIED ACCORDING TO PERSONS AT ONE TIME CAPACITY

TYPE OF DEVELOPED SITE	UNDER 26	26 TO 75	76 TO 150	151 TO 300	301 TO 600	601 TO 1000	OVER 1000	TOTAL	TOTAL CAPACITY (PAOT)	TOTAL DEV.SITE ACRES
OBSERVATION SITES	205	183	63	18	1	2		472	24917	935
PLAYGROUNDS,PARKS,SPORTS SITES	28	24	8	11	7	2	7	87	29499	1927
BOATING SITES	346	363	185	112	63	15	1	1085	107583	3009
SWIMMING SITES	11	67	89	91	41	13	7	319	75738	1279
SUBTOTAL	357	430	274	203	104	28	8	1404	183321	4288
FISHING SITE	16	28	15	4	2			65	5051	310
TRAILHEAD	204	214	84	32	4	2		540	32234	1265
CAMPGROUNDS,FAMILY TYPE	866	1657	991	537	176	23	11	4261	420266	42072
CAMPGROUNDS,GROUP TYPE	13	95	83	27	10		3	231	38353	2107
PICNIC GROUNDS,FAMILY TYPE	450	628	226	87	27	1		1419	92465	7679
PICNIC GROUNDS,GROUP TYPE	2	39	30	26	6			103	14051	569
SUBTOTAL	1331	2419	1330	677	219	24	14	6014	565135	52427
HOTELS,LODGES,RESORTS-FOR.SVC.OWNED	208	2	4	3	1	3	2	223	7952	529
HOTELS,LODGES,RESORTS-PRIVATE OWNED	46	146	70	41	17	4	1	325	36675	2608
SUBTOTAL	254	148	74	44	18	7	3	548	44627	3137
ORGANIZATION SITES-FOR.SVC.OWNED	3	11	16	14				44	5241	766
ORGANIZATION SITES-PRIVATE OWNED	46	88	177	122	11	2	2	448	61602	5472
SUBTOTAL	49	99	193	136	11	2	2	492	66843	6238
OTHER CONCESSIONAIRE SITES	38	52	33	8	7	6		144	16613	1126
RECREATION RESIDENCE SITES	849	315	201	104	33	8	3	1513	90856	13842
SKI AREA	2	2	7	18	19	15	104	167	433644	55586
OTHER WINTER SPORTS SITE	16	28	33	21	10	3	6	117	35514	1997
DOCUMENTARY SITE	115	17	9	4	2	1		148	5855	5681
INTERPRETIVE SITES (MAJOR)	6	11	13	11	7	3	1	52	11804	572
INTERPRETIVE SITES (MINOR)	173	148	80	45	7	2		405	33512	2234
INTERPRETIVE SITES (ADMINISTRATIVE)	172	27	4	1				204	4042	697
INFORMATION SITES	167	38	9	3				217	4959	377
SUBTOTAL	68	224	106	60	14	5	1	878	54317	3880
SERVICEWIDE DEVELOPED SITE TOTAL	3932	4183	2430	1340	451	105	148	12589	1588426	152579

FORM 2300-2C1 (CPO) RIM CENTER 3/24/82

A SUMMARY OF FOREST SERVICE DEVELOPED SITES
NUMBER, CAPACITY, AND SIZE AS OF 2/01/82

REGION-01 Northern FOREST-ALL DISTRICT-ALL

NUMBER OF SITES CLASSIFIED ACCORDING TO PERSONS AT ONE TIME CAPACITY

TYPE OF DEVELOPED SITE	UNDER 26	26 TO 75	76 TO 150	151 TO 300	301 TO 600	601 TO 1000	OVER 1000	TOTAL	TOTAL CAPACITY (PAOT)	TOTAL DEV.SITE ACRES
OBSERVATION SITES	5	4	1	1				11	590	35
PLAYGROUNDS,PARKS,SPORTS SITES		1	1			1		3	1150	115
BOATING SITES	12	35	18	6	1			72	5434	164
SWIMMING SITES	1	5	12	3				21	2215	50
SUBTOTAL	13	40	30	9	1			93	7649	214
FISHING SITE	2							2	35	5
TRAILHEAD	48	22	7	2				79	3155	171
CAMPGROUNDS,FAMILY TYPE	86	146	77	26	6			341	24591	2891
CAMPGROUNDS,GROUP TYPE			2	1				3	450	15
PICNIC GROUNDS,FAMILY TYPE	27	35	14					76	3711	283
PICNIC GROUNDS,GROUP TYPE		6	3	3	2			14	2309	102
SUBTOTAL	113	187	96	30	8			434	31061	3291
HOTELS,LODGES,RESORTS-FOR.SVC.OWNED	1							1	5	1
HOTELS,LODGES,RESORTS-PRIVATE OWNED	9	17	3	2	1			32	1988	240
SUBTOTAL	10	17	3	2	1			33	1993	241
ORGANIZATION SITES-FOR.SVC.OWNED		1	2	2				5	662	60
ORGANIZATION SITES-PRIVATE OWNED	1	1	7					9	955	150
SUBTOTAL	1	2	9	2				14	1617	210
OTHER CONCESSIONAIRE SITES	5	1	2					8	310	27
RECREATION RESIDENCE SITES	52	29	12	6	3	1		103	6641	956
SKI AREA				1	6	2	6	15	22300	1560
OTHER WINTER SPORTS SITE	2	2	2	1	1			8	1055	250
DOCUMENTARY SITE	6	5						11	311	525
INTERPRETIVE SITES (MAJOR)			2	1				3	395	14
INTERPRETIVE SITES (MINOR)	10	11	2		1			24	1415	310
INTERPRETIVE SITES (ADMINISTRATIVE)	8	2	1					11	315	58
INFORMATION SITES	2		2					4	225	8
SUBTOTAL	20	13	7	1	1			42	2350	390
REGION DEVELOPED SITE TOTAL	277	323	170	55	21	4	6	856	80217	7990

FORM 2300-2C1 (CPO) RIM CENTER 3/24/82

A SUMMARY OF FOREST SERVICE DEVELOPED SITES
NUMBER, CAPACITY, AND SIZE AS OF 2/01/82

REGION-02 Rocky Mtn FOREST-ALL DISTRICT-ALL

NUMBER OF SITES CLASSIFIED ACCORDING TO PERSONS AT ONE TIME CAPACITY

TYPE OF DEVELOPED SITE	UNDER 26	26 TO 75	76 TO 150	151 TO 300	301 TO 600	601 TO 1000	OVER 1000	TOTAL	TOTAL CAPACITY (PAOT)	TOTAL DEV.SITE ACRES
OBSERVATION SITES	14	17	13	4				48	3414	110
PLAYGROUNDS,PARKS,SPORTS SITES		4	1	2	2		4	13	8080	487
BOATING SITES	6	15	16	5	2	1		45	5907	183
SWIMMING SITES			1	1	2			4	1195	7
SUBTOTAL	6	15	17	6	4	1		49	7102	190
FISHING SITE	5	11	8	2	2			28	2865	202
TRAILHEAD	38	63	28	5	1			135	7751	281
CAMPGROUNDS,FAMILY TYPE	58	253	142	62	14	2		531	49264	4417
CAMPGROUNDS,GROUP TYPE		4	6	2				12	1295	108
PICNIC GROUNDS,FAMILY TYPE	66	99	17	4	2			188	9305	733
PICNIC GROUNDS,GROUP TYPE		7	7	5				19	2445	75
SUBTOTAL	124	363	172	73	16	2		750	62309	5333
HOTELS,LODGES,RESORTS-FOR.SVC.OWNED	2							2	30	2
HOTELS,LODGES,RESORTS-PRIVATE OWNED	8	28	10	4	1			51	3599	442
SUBTOTAL	10	28	10	4	1			53	3629	444
ORGANIZATION SITES-FOR.SVC.OWNED	1		1	1				3	358	31
ORGANIZATION SITES-PRIVATE OWNED	8	10	17	8				43	4268	403
SUBTOTAL	9	10	18	9				46	4626	434
OTHER CONCESSIONAIRE SITES	3	3	8	3	2			19	2882	426
RECREATION RESIDENCE SITES	335	63	15					413	7205	1463
SKI AREA			2	5	3	2	23	35	103930	13426
OTHER WINTER SPORTS SITE	1	1	2	1	1			6	1005	134
DOCUMENTARY SITE	9	3	2	1	2	1		18	2592	1226
INTERPRETIVE SITES (MAJOR)		1	1	3				5	805	22
INTERPRETIVE SITES (MINOR)	1	11	3	3				18	1531	53
INTERPRETIVE SITES (ADMINISTRATIVE)	13	1						14	228	17
INFORMATION SITES	13	5		1				19	627	57
SUBTOTAL	27	18	4	7				56	3191	149
REGION DEVELOPED SITE TOTAL	581	599	300	122	34	6	27	1669	220581	24305

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FORM 2300-2C1 (CPO) RIM CENTER 3/24/82

A SUMMARY OF FOREST SERVICE DEVELOPED SITES
NUMBER, CAPACITY, AND SIZE AS OF 2/01/82

REGION-03 Southwestern FOREST-ALL DISTRICT-ALL

NUMBER OF SITES CLASSIFIED ACCORDING TO PERSONS AT ONE TIME CAPACITY

TYPE OF DEVELOPED SITE	UNDER 26	26 TO 75	76 TO 150	151 TO 300	301 TO 600	601 TO 1000	OVER 1000	TOTAL	TOTAL CAPACITY (PAOT)	TOTAL DEV.SITE ACRES
OBSERVATION SITES	9	14	5					28	1341	94
PLAYGROUNDS,PARKS,SPORTS SITES		5	1	1	2	1	2	12	6721	417
BOATING SITES	4	9	11	7	7	1		39	7324	255
SWIMMING SITES			1	3				4	800	14
SUBTOTAL	4	9	12	10	7	1		43	8124	269
FISHING SITE	1	6						7	260	17
TRAILHEAD	8	6			1			15	755	23
CAMPGROUNDS,FAMILY TYPE	66	90	47	28	17	1		249	24281	2359
CAMPGROUNDS,GROUP TYPE		4	8	4				16	1965	91
PICNIC GROUNDS,FAMILY TYPE	29	46	18	15	4			112	9404	666
PICNIC GROUNDS,GROUP TYPE	1	5	1	2				9	870	31
SUBTOTAL	96	145	74	49	21	1		386	36520	3147
HOTELS,LODGES,RESORTS-FOR.SVC.OWNED			2	1				3	450	103
HOTELS,LODGES,RESORTS-PRIVATE OWNED		7	3	1	2	1		14	2597	116
SUBTOTAL		7	5	2	2	1		17	3047	219
ORGANIZATION SITES-FOR.SVC.OWNED										
ORGANIZATION SITES-PRIVATE OWNED	2	6	19	10			2	39	8295	610
SUBTOTAL	2	6	19	10			2	39	8295	610
OTHER CONCESSIONAIRE SITES	2	4	4		3	2		15	3969	86
RECREATION RESIDENCE SITES	21	19	17	11	3			71	6705	978
SKI AREA			1	1	1		6	9	17475	788
OTHER WINTER SPORTS SITE		1	2	2		1		6	1565	93
DOCUMENTARY SITE	11							11	105	1174
INTERPRETIVE SITES (MAJOR)	1	2		1				4	395	114
INTERPRETIVE SITES (MINOR)	20	16	6	3	1			46	2718	158
INTERPRETIVE SITES (ADMINISTRATIVE)	23	4	1					28	451	28
INFORMATION SITES	14	2						16	170	22
SUBTOTAL	58	24	7	4	1			94	3734	322
REGION DEVELOPED SITE TOTAL	212	246	147	90	41	7	10	753	98616	8237

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FORM 2300-2C1 (CPO) RIM CENTER 3/24/82

A SUMMARY OF FOREST SERVICE DEVELOPED SITES
NUMBER, CAPACITY, AND SIZE AS OF 2/01/82

REGION-C4 Intermountain FOREST-ALL DISTRICT-ALL

NUMBER OF SITES CLASSIFIED ACCORDING TO PERSONS AT ONE TIME CAPACITY

TYPE OF DEVELOPED SITE	UNDER 26	26 TO 75	76 TO 150	151 TO 300	301 TO 600	601 TO 1000	OVER 1000	TOTAL	TOTAL CAPACITY (PAOT)	TOTAL DEV.SITE ACRES
OBSERVATION SITES	24	12	2					38	1165	50
PLAYGROUNDS,PARKS,SPORTS SITES		3	2	1	1			7	888	99
BOATING SITES	9	29	20	16	3	1		78	9601	297
SWIMMING SITES	1	3	5	2		1		12	2085	58
SUBTOTAL	10	32	25	18	3	2		90	11686	355
FISHING SITE			1					1	110	4
TRAILHEAD	23	21	14	4	1	1		64	4836	306
CAMPGROUNDS,FAMILY TYPE	100	240	145	77	26	4		592	59164	6703
CAMPGROUNDS,GROUP TYPE	1	4	7	6	6		2	26	7646	662
PICNIC GROUNDS,FAMILY TYPE	27	46	15	6	4			98	7070	571
PICNIC GROUNDS,GROUP TYPE		7	11	11	3			32	5137	196
SUBTOTAL	128	297	178	100	39	4	2	748	79017	8132
HOTELS,LODGES,RESORTS-FOR.SVC.OWNED			1	1				2	280	2
HOTELS,LODGES,RESORTS-PRIVATE OWNED	8	22	11	7	2			50	4743	474
SUBTOTAL	8	22	12	8	2			52	5023	476
ORGANIZATION SITES-FOR.SVC.OWNED				1				1	210	79
ORGANIZATION SITES-PRIVATE OWNED	6	10	30	17	2			65	8997	1075
SUBTOTAL	6	10	30	18	2			66	9207	1154
OTHER CONCESSIONAIRE SITES	9	4	4	1				18	1060	37
RECREATION RESIDENCE SITES	81	42	18	15	1			157	8316	2589
SKI AREA			2	1	4	3	17	27	65540	14903
OTHER WINTER SPORTS SITE	4	9	7	4	2			26	3030	297
DOCUMENTARY SITE	14	1	1	1				17	655	1229
INTERPRETIVE SITES (MAJOR)	2	3	2					7	395	35
INTERPRETIVE SITES (MINOR)	25	29	15	2				71	4153	166
INTERPRETIVE SITES (ADMINISTRATIVE)	19	4						23	476	116
INFORMATION SITES	30	4						34	477	43
SUBTOTAL	76	40	17	2				135	5501	360
REGION DEVELOPED SITE TOTAL	383	493	313	173	55	10	19	1446	196034	29991

FORM 2300-2C1 (CPO) RIM CENTER 3/24/82

A SUMMARY OF FOREST SERVICE DEVELOPED SITES
NUMBER, CAPACITY, AND SIZE AS OF 2/01/82

REGION-05 Pacific Southwest FOREST-ALL DISTRICT-ALL

NUMBER OF SITES CLASSIFIED ACCORDING TO PERSONS AT ONE TIME CAPACITY

TYPE OF DEVELOPED SITE	UNDER 26	26 TO 75	76 TO 150	151 TO 300	301 TO 600	601 TO 1000	OVER 1000	TOTAL	TOTAL CAPACITY (PAOT)	TOTAL DEV.SITE ACRES
OBSERVATION SITES	30	19	3	3				55	2355	83
PLAYGROUNDS,PARKS,SPORTS SITES		6	2	5	1		1	15	11210	647
BOATING SITES	13	14	21	28	16	8		100	22655	369
SWIMMING SITES	1	1	5	12	4	3	3	29	11415	191
SUBTOTAL	14	15	26	40	20	11	3	129	34070	560
FISHING SITE	2	3	3	1				9	697	12
TRAILHEAD	32	34	8	4	1			79	4137	126
CAMPGROUNDS,FAMILY TYPE	111	325	195	111	49	9	5	805	97453	7485
CAMPGROUNDS,GROUP TYPE	5	47	29	11	1		1	94	20208	548
PICNIC GROUNDS,FAMILY TYPE	57	93	36	12	4	1		203	14075	916
PICNIC GROUNDS,GROUP TYPE			1	1				2	400	10
SUBTOTAL	173	465	261	135	54	10	6	1104	132136	8959
HOTELS,LODGES,RESORTS-FOR.SVC.OWNED					1	1	1	3	2780	105
HOTELS,LODGES,RESORTS-PRIVATE OWNED	6	32	32	15	6	2		93	12666	608
SUBTOTAL	6	32	32	15	7	3	1	96	15446	713
ORGANIZATION SITES-FOR.SVC.OWNED		1	3					4	465	40
ORGANIZATION SITES-PRIVATE OWNED	13	35	61	67	8	1		185	27407	2120
SUBTOTAL	13	36	64	67	8	1		189	27872	2160
OTHER CONCESSIONAIRE SITES	13	34	5	3	2	1		58	4332	278
RECREATION RESIDENCE SITES	121	62	75	49	19	3	2	331	36711	4346
SKI AREA		1	1	4	2	4	22	34	96218	9163
OTHER WINTER SPORTS SITE		1	5	1	2	1	1	11	4250	180
DOCUMENTARY SITE	18		2	1				21	723	482
INTERPRETIVE SITES (MAJOR)			3		1	1		5	1540	105
INTERPRETIVE SITES (MINOR)	9	22	16	14		1		62	7135	317
INTERPRETIVE SITES (ADMINISTRATIVE)	93	9	2	1				105	2032	388
INFORMATION SITES	51	14	5					70	1696	100
SUBTOTAL	153	45	26	15	1	2		242	12403	910
REGION DEVELOPED SITE TOTAL	575	753	513	343	117	36	36	2373	382560	28619

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FORM 2300-2C1 (CPO) RIM CENTER 3/24/82

A SUMMARY OF FOREST SERVICE DEVELOPED SITES
NUMBER, CAPACITY, AND SIZE AS OF 2/01/82

REGION-06 Pacific Northwest FOREST-ALL DISTRICT-ALL

NUMBER OF SITES CLASSIFIED ACCORDING TO PERSONS AT ONE TIME CAPACITY

TYPE OF DEVELOPED SITE	UNDER 26	26 TO 75	76 TO 150	151 TO 300	301 TO 600	601 TO 1000	OVER 1000	TOTAL	TOTAL CAPACITY (PAOT)	TOTAL DEV.SITE ACRES
OBSERVATION SITES	38	32	9	3				82	3749	150
PLAYGROUNDS,PARKS,SPORTS SITES										
BOATING SITES	55	74	36	11	5	1	1	183	14582	381
SWIMMING SITES	4	10	11	4				29	2905	58
SUBTOTAL	59	84	47	15	5	1	1	212	17487	439
FISHING SITE	3	1						4	90	4
TRAILHEAD	23	37	14	15				89	6755	187
CAMPGROUNDS,FAMILY TYPE	268	350	187	87	28	2	4	926	78036	7748
CAMPGROUNDS,GROUP TYPE	1	10	8					19	1414	275
PICNIC GROUNDS,FAMILY TYPE	67	71	31	11	4			184	12053	761
PICNIC GROUNDS,GROUP TYPE		2	1		1			4	560	15
SUBTOTAL	336	433	227	98	33	2	4	1133	92063	8799
HOTELS,LODGES,RESORTS-FOR.SVC.OWNED	2					2	1	5	2822	15
HOTELS,LODGES,RESORTS-PRIVATE OWNED	4	14	6	9	5	1	1	40	8272	471
SUBTOTAL	6	14	6	9	5	3	2	45	11094	486
ORGANIZATION SITES-FOR.SVC.OWNED	1	4	2	5				12	1388	190
ORGANIZATION SITES-PRIVATE OWNED	10	20	36	11	1			78	8048	742
SUBTOTAL	11	24	38	16	1			90	9436	932
OTHER CONCESSIONAIRE SITES	4	3	4	1		2		14	2629	164
RECREATION RESIDENCE SITES	34	49	25	16	5	4	1	134	15244	1623
SKI AREA	1			2	3		19	25	80561	12382
OTHER WINTER SPORTS SITE	9	11	9	11	2		4	46	17434	782
DOCUMENTARY SITE	31	4	1					36	466	271
INTERPRETIVE SITES (MAJOR)	1	1	1	2	1	1		7	1483	35
INTERPRETIVE SITES (MINOR)	16	10	7	1				34	1737	106
INTERPRETIVE SITES (ADMINISTRATIVE)	8	2						10	193	29
INFORMATION SITES	25	2						27	440	50
SUBTOTAL	50	15	8	3	1	1		78	3853	220
REGION DEVELOPED SITE TOTAL	605	707	388	189	55	13	31	1988	260861	26439

FORM 23CO-2C1 (CPO) RIM CENTER 3/24/82

A SUMMARY OF FOREST SERVICE DEVELOPED SITES
NUMBER, CAPACITY, AND SIZE AS OF 2/01/82

REGION-08 Southern FOREST-ALL DISTRICT-ALL

NUMBER OF SITES CLASSIFIED ACCORDING TO PERSONS AT ONE TIME CAPACITY

TYPE OF DEVELOPED SITE	UNDER 26	26 TO 75	76 TO 150	151 TO 300	301 TO 600	601 TO 1000	OVER 1000	TOTAL	TOTAL CAPACITY (PAOT)	TOTAL DEV.SITE ACRES
OBSERVATION SITES	42	69	17	3	1	1		133	7740	205
PLAYGROUNDS,PARKS,SPORTS SITES	25	2						27	350	75
BOATING SITES	41	67	33	26	21			188	22338	571
SWIMMING SITES	1	6	18	46	24	5	1	101	29681	616
SUBTOTAL	42	73	51	72	45	5	1	289	52019	1187
FISHING SITE	2	7	3	1				13	969	65
TRAILHEAD	6	8	4					18	957	24
CAMPGROUNDS,FAMILY TYPE	46	132	90	62	18	2	2	352	40730	4959
CAMPGROUNDS,GROUP TYPE	2	14	12	1				29	2280	159
PICNIC GROUNDS,FAMILY TYPE	63	112	56	25	3			259	19048	2044
PICNIC GROUNDS,GROUP TYPE	1	11	4	2				18	1615	39
SUBTOTAL	112	269	162	90	21	2	2	658	63673	7201
HOTELS,LODGES,RESORTS-FOR.SVC.OWNED	3	2						5	135	48
HOTELS,LODGES,RESORTS-PRIVATE OWNED				3				3	750	25
SUBTOTAL	3	2		3				8	885	73
ORGANIZATION SITES-FOR.SVC.OWNED	1	2	3	3				9	1167	182
ORGANIZATION SITES-PRIVATE OWNED	2		6	6				14	1837	271
SUBTOTAL	3	2	9	9				23	3004	453
OTHER CONCESSIONAIRE SITES	2	1	2			1		6	975	28
RECREATION RESIDENCE SITES	13	17	12	4	2			48	3749	767
SKI AREA										
OTHER WINTER SPORTS SITE										
DOCUMENTARY SITE	7	2		1				10	410	528
INTERPRETIVE SITES (MAJOR)	1	2	1	1	5		1	11	4615	161
INTERPRETIVE SITES (MINOR)	16	29	28	21	5	1		100	12754	755
INTERPRETIVE SITES (ADMINISTRATIVE)	1	3						4	161	51
INFORMATION SITES	13	5	1	2				21	747	42
SUBTOTAL	31	39	30	24	10	1	1	136	18277	1009
REGION DEVELOPED SITE TOTAL	288	491	290	207	79	10	4	1369	153008	11615

FORM 2300-201 (CPO) RIM CENTER 3/24/82

A SUMMARY OF FOREST SERVICE DEVELOPED SITES
NUMBER, CAPACITY, AND SIZE AS OF 2/01/82

REGION-09 Eastern FOREST-ALL DISTRICT-ALL

NUMBER OF SITES CLASSIFIED ACCORDING TO PERSONS AT ONE TIME CAPACITY

TYPE OF DEVELOPED SITE	UNDER 26	26 TO 75	76 TO 150	151 TO 300	301 TO 600	601 TO 1000	OVER 1000	TOTAL	TOTAL CAPACITY (PAOT)	TOTAL DEV.SITE ACRES
OBSERVATION SITES	38	14	13	4		1		70	4423	201
PLAYGROUNDS,PARKS,SPORTS SITES	1	3	1	1	1			7	785	59
BOATING SITES	187	116	29	13	8	3		356	19376	775
SWIMMING SITES	2	42	35	20	11	4	3	117	25327	283
SUBTOTAL	189	158	64	33	19	7	3	473	44703	1058
FISHING SITE										
TRAILHEAD	8	15	4	1		1		29	2432	51
CAMPGROUNDS,FAMILY TYPE	120	111	100	81	17	2		431	43398	5238
CAMPGROUNDS,GROUP TYPE	4	12	11	2	3			32	3095	249
PICNIC GROUNDS,FAMILY TYPE	100	116	38	14	6			274	16969	1638
PICNIC GROUNDS,GROUP TYPE		1	1	2				4	595	97
SUBTOTAL	224	240	150	99	26	2		741	64057	7222
HOTELS,LODGES,RESORTS-FOR.SVC.OWNED	3		1					4	114	11
HOTELS,LODGES,RESORTS-PRIVATE OWNED	6	25	4					35	1807	183
SUBTOTAL	9	25	5					39	1921	194
ORGANIZATION SITES-FOR.SVC.OWNED		3	5	2				10	991	184
ORGANIZATION SITES-PRIVATE OWNED	2	5		3		1		11	1621	85
SUBTOTAL	2	8	5	5		1		21	2612	269
OTHER CONCESSIONAIRE SITES		2	1					3	165	12
RECREATION RESIDENCE SITES	161	27	26	2				216	5481	956
SKI AREA	1	1	1	4		4	9	20	42620	2435
OTHER WINTER SPORTS SITE		3	6	1	1	1	1	13	6775	256
DOCUMENTARY SITE	11	2	2					15	427	161
INTERPRETIVE SITES (MAJOR)		2	3	2				7	961	82
INTERPRETIVE SITES (MINOR)	17	14	2	1				34	1486	351
INTERPRETIVE SITES (ADMINISTRATIVE)	3	2						5	126	6
INFORMATION SITES	12	6						18	424	47
SUBTOTAL	32	24	5	3				64	2997	486
REGION DEVELOPED SITE TOTAL	676	522	283	153	47	17	13	1711	179398	13360

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FORM 2300-2C1 (CPO) RIM CENTER 3/24/82

A SUMMARY OF FOREST SERVICE DEVELOPED SITES
NUMBER, CAPACITY, AND SIZE AS OF 2/01/82

REGION-10 Alaska FOREST-ALL DISTRICT-ALL

NUMBER OF SITES CLASSIFIED ACCORDING TO PERSONS AT ONE TIME CAPACITY

TYPE OF DEVELOPED SITE	UNDER 26	26 TO 75	76 TO 150	151 TO 300	301 TO 600	601 TO 1000	OVER 1000	TOTAL	TOTAL CAPACITY (PAOT)	TOTAL DEV.SITE ACRES
OBSERVATION SITES	5	2						7	140	7
PLAYGROUNDS,PARKS,SPORTS SITES	2			1				3	315	28
BOATING SITES	19	4	1					24	366	14
SWIMMING SITES	1		1					2	115	2
SUBTOTAL	20	4	2					26	481	16
FISHING SITE	1							1	25	1
TRAILHEAD	18	8	5	1				32	1456	36
CAMPGROUNDS,FAMILY TYPE	11	10	8	3	1	1		34	3349	252
CAMPGROUNDS,GROUP TYPE										
PICNIC GROUNDS,FAMILY TYPE	14	10	1					25	830	87
PICNIC GROUNDS,GROUP TYPE			1					1	120	4
SUBTOTAL	25	20	10	3	1	1		60	4299	343
HOTELS,LODGES,RESORTS-FOR.SVC.OWNED	197			1				198	1336	242
HOTELS,LODGES,RESORTS-PRIVATE OWNED	5	1	1					7	253	49
SUBTOTAL	202	1	1	1				205	1589	291
ORGANIZATION SITES-FOR.SVC.OWNED										
ORGANIZATION SITES-PRIVATE OWNED	2	1	1					4	174	16
SUBTOTAL	2	1	1					4	174	16
OTHER CONCESSIONAIRE SITES			3					3	291	68
RECREATION RESIDENCE SITES	31	7	1	1				40	804	164
SKI AREA							2	2	5000	929
OTHER WINTER SPORTS SITE					1			1	400	5
DOCUMENTARY SITE	8		1					9	166	85
INTERPRETIVE SITES (MAJOR)	1			1		1		3	1215	4
INTERPRETIVE SITES (MINOR)	9	6	1					16	583	18
INTERPRETIVE SITES (ADMINISTRATIVE)	4							4	60	4
INFORMATION SITES	7		1					8	153	8
SUBTOTAL	21	6	2	1		1		31	2011	34
REGION DEVELOPED SITE TOTAL	335	49	26	8	2	2	2	424	17151	2023

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Total recreation use, including wilderness, by Region for 1981 is:

Region	Recreation Visitor Days
Northern Region	13,208,700
Rocky Mountain Region	29,263,100
Southwestern Region	24,115,400
Intermountain Region	28,223,400
Pacific Northwest Region	32,188,000
Pacific Southwest Region	53,674,800
Southern Region	28,755,200
Eastern Region	23,060,700
Alaska Region	3,219,700
Total	235,709,000

Use figures for 1982 will be available December 1982. Use figures for 1983 will be available December 1983.

Funding by Regions for 1981, 1982 and 1983

Region	1981 1/	1982	1983 (estimate)
Northern	4,617,100	3,579,000	3,698,000
Rocky Mountain	11,163,600	7,404,000	8,015,000
Southwestern	5,552,600	5,378,000	5,505,000
Intermountain	11,743,700	9,303,000	9,431,000
Pacific Southwest	23,985,600	19,261,000	18,853,000
Pacific Northwest	10,812,600	10,030,000	11,800,000
Southern	23,815,500	8,629,000	10,042,000
Eastern	16,392,200	8,876,000	9,625,000
Alaska	6,480,500	3,471,000	3,583,000

1/ Includes General Administration, 1982 and 1983 data does not.

Question: Can you provide the same information for the ten National Forests with heaviest recreation use?

Answer: The following Table contains the recreation use data for 1981 for the ten National Forests reporting the most Recreation Visitor Days.

Forest	Recreation Visitor Days
Wasatch	6,732,500
San Bernardino	6,178,100
Arapaho-Roosevelt	5,884,600
Tonto	5,669,700
Angeles	5,247,100
National Forest of North Carolina	5,222,600
Wenatchee	5,204,000
White River	5,035,800
Coconini	4,957,300
Sierra	4,718,100

Use figures for 1982 will be available December 1982. Use figures for 1983 will be available December 1983.

We are providing a statistical summary of Forest Service developed sites for each of the National Forest developed sites for each of these National Forests as of February 1, 1981.

FORM 2300-2C1 (CPO) RIM CENTER 7/02/82

A SUMMARY OF FOREST SERVICE DEVELOPED SITES
NUMBER, CAPACITY, AND SIZE AS OF 2/01/82

REGION-04 FOREST-19 WASATCH-CACHE N F DISTRICT-ALL

NUMBER OF SITES CLASSIFIED ACCORDING TO PERSONS AT ONE TIME CAPACITY

TYPE OF DEVELOPED SITE	UNDER 26	26 TO 75	76 TO 150	151 TO 300	301 TO 600	601 TO 1000	OVER 1000	TOTAL	TOTAL CAPACITY (PAOT)	TOTAL DEV. SITE ACRES
OBSERVATION SITES	11	6						17	530	18
PLAYGROUNDS, PARKS, SPORTS SITES		2		1	1			4	638	80
BOATING SITES	1	1	1		1			4	805	9
SWIMMING SITES						1		1	770	23
SUBTOTAL	1	1	1		1	1		5	1575	32
FISHING SITE										
TRAILHEAD	1	5	6	2				14	1243	132
CAMPGROUNDS, FAMILY TYPE	5	28	19	15	7	1		75	10630	915
CAMPGROUNDS, GROUP TYPE					1		1	2	1795	90
PICNIC GROUNDS, FAMILY TYPE	11	13	6	2	2			34	2460	225
PICNIC GROUNDS, GROUP TYPE			4	2	1			7	1380	44
SUBTOTAL	16	41	29	19	11	1	1	118	16265	1274
HOTELS, LODGES, RESORTS-FOR. SVC. OWNED			1	1				2	280	2
HOTELS, LODGES, RESORTS-PRIVATE OWNED			3	2				5	720	15
SUBTOTAL			4	3				7	1000	17
ORGANIZATION SITES-FOR. SVC. OWNED										
ORGANIZATION SITES-PRIVATE OWNED	2	2	7	3	1			15	1928	137
SUBTOTAL	2	2	7	3	1			15	1928	137
OTHER CONCESSIONAIRE SITES	3	2	2	1				8	683	9
RECREATION RESIDENCE SITES	8	6	3	5				22	1840	236
SKI AREA							7	7	32050	7080
OTHER WINTER SPORTS SITE		1	1					2	145	1
DOCUMENTARY SITE										
INTERPRETIVE SITES (MAJOR)										
INTERPRETIVE SITES (MINOR)	3	6	2					11	535	20
INTERPRETIVE SITES (ADMINISTRATIVE)	2							2	16	3
INFORMATION SITES	7	2						9	216	12
SUBTOTAL	12	8	2					22	767	35
FOREST DEVELOPED SITE TOTAL	54	74	55	34	14	2	8	241	58664	9051

FORM 2300-2C1 (CPO)　　　　　　　　　　　　　　RIM CENTER 7/02/82

A SUMMARY OF FOREST SERVICE DEVELOPED SITES
NUMBER, CAPACITY, AND SIZE AS OF 2/01/82

REGION-05　　　FOREST-12　SAN BERNARDINO N F　　　DISTRICT-ALL

NUMBER OF SITES CLASSIFIED ACCORDING TO PERSONS AT ONE TIME CAPACITY

TYPE OF DEVELOPED SITE	UNDER 26	26 TO 75	76 TO 150	151 TO 300	301 TO 600	601 TO 1000	OVER 1000	TOTAL	TOTAL CAPACITY (PAOT)	TOTAL DEV. SITE ACRES
OBSERVATION SITES	1							1	10	1
PLAYGROUNDS, PARKS, SPORTS SITES		1	1					2	140	56
BOATING SITES										
SWIMMING SITES				1				1	300	2
SUBTOTAL				1				1	300	2
FISHING SITE										
TRAILHEAD			1					1	125	3
CAMPGROUNDS, FAMILY TYPE	1	3	11	7	3		1	26	5970	390
CAMPGROUNDS, GROUP TYPE	3	16	2					21	975	91
PICNIC GROUNDS, FAMILY TYPE		6	3	2	1			12	1490	59
PICNIC GROUNDS, GROUP TYPE										
SUBTOTAL	4	25	16	9	4		1	59	8435	540
HOTELS, LODGES, RESORTS-FOR. SVC. OWNED										
HOTELS, LODGES, RESORTS-PRIVATE OWNED		2	2					4	258	19
SUBTOTAL		2	2					4	258	19
ORGANIZATION SITES-FOR. SVC. OWNED										
ORGANIZATION SITES-PRIVATE OWNED	1	2	13	15	2			33	5311	350
SUBTOTAL	1	2	13	15	2			33	5311	350
OTHER CONCESSIONAIRE SITES						1		1	615	13
RECREATION RESIDENCE SITES	10	8	6	4	3		1	32	4607	468
SKI AREA					1		4	5	15213	882
OTHER WINTER SPORTS SITE					1			1	500	19
DOCUMENTARY SITE	2							2	8	1
INTERPRETIVE SITES (MAJOR)										
INTERPRETIVE SITES (MINOR)		3	4	1				8	890	36
INTERPRETIVE SITES (ADMINISTRATIVE)		1	2					3	290	27
INFORMATION SITES	1							1	25	1
SUBTOTAL	1	4	6	1				12	1205	64
FOREST DEVELOPED SITE TOTAL	19	42	45	30	11	1	6	154	36727	2418

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FORM 2300-201 (CPO) FIM CENTER 7/07/82

A SUMMARY OF FOREST SERVICE DEVELOPED SITES
NUMBER, CAPACITY, AND SIZE AS OF 2/01/82

REGION-02 FOREST-10 ARAPAHO-ROOSEVELT N F DISTRICT-ALL

NUMBER OF SITES CLASSIFIED ACCORDING TO PERSONS AT ONE TIME CAPACITY

TYPE OF DEVELOPED SITE	UNDER 26	26 TO 75	76 TO 150	151 TO 300	301 TO 600	601 TO 1000	OVER 1000	TOTAL	TOTAL CAPACITY (PAOT)	TOTAL DEV.SITE ACRES
OBSERVATION SITES	2	1	2					5	290	6
PLAYGROUNDS,PARKS,SPORTS SITES		1						1	30	3
BOATING SITES	2	1	5					8	618	13
SWIMMING SITES										
SUBTOTAL	2	1	5					8	618	13
FISHING SITE	4	5	1		1			11	976	42
TRAILHEAD	13	8	6	3	1			31	2011	40
CAMPGROUNDS,FAMILY TYPE	13	17	14	10	3	1		58	6725	566
CAMPGROUNDS,GROUP TYPE			2					2	200	19
PICNIC GROUNDS,FAMILY TYPE	21	29	1					51	1745	139
PICNIC GROUNDS,GROUP TYPE				3				3	670	11
SUBTOTAL	34	46	17	13	3	1		114	9340	735
HOTELS,LODGES,RESORTS-FOR.SVC.OWNED										
HOTELS,LODGES,RESORTS-PRIVATE OWNED		2	1		1			4	492	9
SUBTOTAL		2	1		1			4	492	9
ORGANIZATION SITES-FOR.SVC.OWNED	1							1	8	1
ORGANIZATION SITES-PRIVATE OWNED	6	1	1	1				9	419	28
SUBTOTAL	7	1	1	1				10	427	29
OTHER CONCESSIONAIRE SITES			2					2	248	26
RECREATION RESIDENCE SITES	58	6	4					68	1175	171
SKI AREA							3	3	13400	1120
OTHER WINTER SPORTS SITE		1			1			2	450	48
DOCUMENTARY SITE	3							3		
INTERPRETIVE SITES (MAJOR)										
INTERPRETIVE SITES (MINOR)	1	2		2				5	565	13
INTERPRETIVE SITES (ADMINISTRATIVE)	5							5	83	6
INFORMATION SITES	2							2	15	2
SUBTOTAL	8	2		2				12	663	21
FOREST DEVELOPED SITE TOTAL	131	74	39	19	7	1	3	274	30112	2273

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FORM 2300-2C1 (CPO) RIM CENTER 7/07/82

A SUMMARY OF FOREST SERVICE DEVELOPED SITES
NUMBER, CAPACITY, AND SIZE AS OF 2/01/82

REGION-03 FOREST-12 TONTO N F DISTRICT-ALL

NUMBER OF SITES CLASSIFIED ACCORDING TO PERSONS AT ONE TIME CAPACITY

TYPE OF DEVELOPED SITE	UNDER 26	26 TO 75	76 TO 150	151 TO 300	301 TO 600	601 TO 1000	OVER 1000	TOTAL	TOTAL CAPACITY (PAOT)	TOTAL DEV.SITE ACRES
OBSERVATION SITES		1						1	40	7
PLAYGROUNDS,PARKS,SPORTS SITES					1		1	2	2890	117
BOATING SITES	1	2	4	3	3	1		14	3500	198
SWIMMING SITES				2				2	400	2
SUBTOTAL	1	2	4	5	3	1		16	3900	200
FISHING SITE		6						6	235	15
TRAILHEAD	3	4			1			8	570	13
CAMPGROUNDS,FAMILY TYPE	9	8	9	1	3			30	3035	266
CAMPGROUNDS,GROUP TYPE			1					1	100	5
PICNIC GROUNDS,FAMILY TYPE	6	3		4	1			14	1525	48
PICNIC GROUNDS,GROUP TYPE		1						1	40	1
SUBTOTAL	15	12	10	5	4			46	4700	320
HOTELS,LODGES,RESORTS-FOR.SVC.OWNED				1				1	200	39
HOTELS,LODGES,RESORTS-PRIVATE OWNED		1	1		1			3	650	31
SUBTOTAL		1	1	1	1			4	850	70
ORGANIZATION SITES-FOR.SVC.OWNED										
ORGANIZATION SITES-PRIVATE OWNED		1	2	1			1	5	2050	174
SUBTOTAL		1	2	1			1	5	2050	174
OTHER CONCESSIONAIRE SITES					1	2		3	2250	43
RECREATION RESIDENCE SITES	1	2	3	5				11	1631	107
SKI AREA										
OTHER WINTER SPORTS SITE										
DOCUMENTARY SITE										
INTERPRETIVE SITES (MAJOR)										
INTERPRETIVE SITES (MINOR)	1							1	20	1
INTERPRETIVE SITES (ADMINISTRATIVE)										
INFORMATION SITES	10							10	58	18
SUBTOTAL	11							11	78	19
FOREST DEVELOPED SITE TOTAL	31	29	20	17	11	3	2	113	19194	1085

FORM 2300-201 (CPU) RIM CENTER 7/07/82

A SUMMARY OF FOREST SERVICE DEVELOPED SITES
NUMBER, CAPACITY, AND SIZE AS OF 2/01/82

REGION-05 FOREST-01 ANGELES N.F. DISTRICT-ALL

TYPE OF DEVELOPED SITE	NUMBER OF SITES CLASSIFIED ACCORDING TO PERSONS AT ONE TIME CAPACITY UNDER 26	26 TO 75	76 TO 150	151 TO 300	301 TO 600	601 TO 1000	OVER 1000	TOTAL	TOTAL CAPACITY (PAOT)	TOTAL DEV.SITE ACRES
OBSERVATION SITES	3	5		2				10	740	12
PLAYGROUNDS,PARKS,SPORTS SITES		3		1	1			5	770	185
BOATING SITES		1				1		2	864	2
SWIMMING SITES					1	1		2	1150	5
SUBTOTAL		1			1	2		4	2014	7
FISHING SITE										
TRAILHEAD		2						2	95	3
CAMPGROUNDS,FAMILY TYPE	17	38	12	1	2		1	71	5885	568
CAMPGROUNDS,GROUP TYPE		5	3	1				9	970	49
PICNIC GROUNDS,FAMILY TYPE	16	22	7	1	2	1		49	3803	305
PICNIC GROUNDS,GROUP TYPE										
SUBTOTAL	33	65	22	3	4	1	1	129	10658	922
HOTELS,LODGES,RESORTS-FOR.SVC.OWNED										
HOTELS,LODGES,RESORTS-PRIVATE OWNED	2	2	5	1				10	950	33
SUBTOTAL	2	2	5	1				10	950	33
ORGANIZATION SITES-FOR.SVC.OWNED			1					1	100	3
ORGANIZATION SITES-PRIVATE OWNED	5	15	10	4				34	2859	212
SUBTOTAL	5	15	11	4				35	2959	215
OTHER CONCESSIONAIRE SITES		2		1				3	290	12
RECREATION RESIDENCE SITES	4	3	5	7	4	1		24	4775	630
SKI AREA		1		1		2	4	8	11375	580
OTHER WINTER SPORTS SITE					1		1	2	1900	97
DOCUMENTARY SITE										
INTERPRETIVE SITES (MAJOR)			1					1	150	10
INTERPRETIVE SITES (MINOR)		1		1				2	330	63
INTERPRETIVE SITES (ADMINISTRATIVE)	4	3		1				8	495	13
INFORMATION SITES	7		1					8	150	9
SUBTOTAL	11	4	2	2				19	1125	95
FOREST DEVELOPED SITE TOTAL	58	103	45	22	11	6	6	251	37651	2791

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FORM 2300-201 (CPO)　　　　RIM CENTER 7/27/82

A SUMMARY OF FOREST SERVICE DEVELOPED SITES
NUMBER, CAPACITY, AND SIZE AS OF 2/01/82

REGION-08　　　FOREST-11 NFS IN NORTH CAROLINA　　　DISTRICT-ALL

NUMBER OF SITES CLASSIFIED ACCORDING TO PERSONS AT ONE TIME CAPACITY

TYPE OF DEVELOPED SITE	UNDER 26	26 TO 75	76 TO 150	151 TO 300	301 TO 600	601 TO 1000	OVER 1000	TOTAL	TOTAL CAPACITY (PAOT)	TOTAL DEV.SITE ACRES
OBSERVATION SITES	1	9	2		1			13	1090	19
PLAYGROUNDS.PARKS.SPORTS SITES	2							2	40	16
BOATING SITES	1	11	5	3	1			21	2250	52
SWIMMING SITES			3	4				7	1200	16
SUBTOTAL	1	11	8	7	1			28	3450	68
FISHING SITE										
TRAILHEAD	4	5						9	325	9
CAMPGROUNDS.FAMILY TYPE	17	9	9	7	4			46	4945	365
CAMPGROUNDS.GROUP TYPE		3	4	1				8	850	62
PICNIC GROUNDS.FAMILY TYPE	8	13	11	5				37	3030	197
PICNIC GROUNDS.GROUP TYPE										
SUBTOTAL	25	25	24	13	4			91	8825	624
HOTELS.LODGES.RESORTS-FOR.SVC.OWNED	1							1	8	5
HOTELS.LODGES.RESORTS-PRIVATE OWNED				1				1	300	8
SUBTOTAL	1			1				2	308	13
ORGANIZATION SITES-FOR.SVC.OWNED										
ORGANIZATION SITES-PRIVATE OWNED										
SUBTOTAL										
OTHER CONCESSIONAIRE SITES										
RECREATION RESIDENCE SITES		3	1					4	260	35
SKI AREA										
OTHER WINTER SPORTS SITE										
DOCUMENTARY SITE	1							1		
INTERPRETIVE SITES (MAJOR)					3			3	1600	40
INTERPRETIVE SITES (MINOR)	3	2	1	3				9	871	49
INTERPRETIVE SITES (ADMINISTRATIVE)	1	1						2	95	45
INFORMATION SITES		1						1	50	1
SUBTOTAL	4	4	1	3	3			15	2616	135
FOREST DEVELOPED SITE TOTAL	39	57	36	24	9			165	16914	919

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FORM 2300-2C1 (CPO) RIM CENTER 7/27/82

A SUMMARY OF FOREST SERVICE DEVELOPED SITES
NUMBER, CAPACITY, AND SIZE AS OF 2/01/82

REGION-06 FOREST-17 WENATCHEE N F DISTRICT-ALL

NUMBER OF SITES CLASSIFIED ACCORDING TO PERSONS AT ONE TIME CAPACITY

TYPE OF DEVELOPED SITE	UNDER 26	26 TO 75	76 TO 150	151 TO 300	301 TO 600	601 TO 1000	OVER 1000	TOTAL	TOTAL CAPACITY (PAOT)	TOTAL DEV.SITE ACRES
OBSERVATION SITES	3	3						6	201	8
PLAYGROUNDS,PARKS,SPORTS SITES										
BOATING SITES	3	4	2					9	462	19
SWIMMING SITES										
SUBTOTAL	3	4	2					9	462	19
FISHING SITE										
TRAILHEAD	2	1						3	85	5
CAMPGROUNDS,FAMILY TYPE	60	38	17	5	4	1	1	126	9463	963
CAMPGROUNDS,GROUP TYPE		3						3	139	43
PICNIC GROUNDS,FAMILY TYPE	5		2					7	317	30
PICNIC GROUNDS,GROUP TYPE										
SUBTOTAL	65	41	19	5	4	1	1	136	9919	1036
HOTELS,LODGES,RESORTS-FOR.SVC.OWNED										
HOTELS,LODGES,RESORTS-PRIVATE OWNED	1	2	1	3				7	1017	61
SUBTOTAL	1	2	1	3				7	1017	61
ORGANIZATION SITES-FOR.SVC.OWNED										
ORGANIZATION SITES-PRIVATE OWNED		6	9	2	1			18	2259	165
SUBTOTAL		6	9	2	1			18	2259	165
OTHER CONCESSIONAIRE SITES	2							2	27	4
RECREATION RESIDENCE SITES	14	25	8	6	1			54	3679	484
SKI AREA	1			1			1	3	3305	80
OTHER WINTER SPORTS SITE				1			1	2	2700	122
DOCUMENTARY SITE										
INTERPRETIVE SITES (MAJOR)										
INTERPRETIVE SITES (MINOR)										
INTERPRETIVE SITES (ADMINISTRATIVE)										
INFORMATION SITES	1							1	20	1
SUBTOTAL	1							1	20	1
FOREST DEVELOPED SITE TOTAL	92	82	39	18	6	1	3	241	23674	1985

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FORM 2300-201 (CPO) RIM CENTER 7/07/82

A SUMMARY OF FOREST SERVICE DEVELOPED SITES
NUMBER, CAPACITY, AND SIZE AS OF 2/01/82

REGION-02 FOREST-15 WHITE RIVER N F DISTRICT-ALL

NUMBER OF SITES CLASSIFIED ACCORDING TO PERSONS AT ONE TIME CAPACITY

TYPE OF DEVELOPED SITE	UNDER 26	26 TO 75	76 TO 150	151 TO 300	301 TO 600	601 TO 1000	OVER 1000	TOTAL	TOTAL CAPACITY (PAOT)	TOTAL DEV.SITE ACRES
OBSERVATION SITES	4		3	3				10	1065	41
PLAYGROUNDS,PARKS,SPORTS SITES					1		4	5	6870	292
BOATING SITES	1	1	1		1	1		5	1606	74
SWIMMING SITES										
SUBTOTAL	1	1	1		1	1		5	1606	74
FISHING SITE		4	1	2				7	775	120
TRAILHEAD	11	19	13	2				45	2825	62
CAMPGROUNDS,FAMILY TYPE	10	31	14	10	7			72	8295	588
CAMPGROUNDS,GROUP TYPE		2	1					3	200	7
PICNIC GROUNDS,FAMILY TYPE	3	5	1		1			10	780	43
PICNIC GROUNDS,GROUP TYPE				1				1	230	2
SUBTOTAL	13	38	16	11	8			86	9505	640
MOTELS,LODGES,RESORTS-FOR.SVC.OWNED	2							2	30	2
MOTELS,LODGES,RESORTS-PRIVATE OWNED	1	4	1					6	337	40
SUBTOTAL	3	4	1					8	367	42
ORGANIZATION SITES-FOR.SVC.OWNED										
ORGANIZATION SITES-PRIVATE OWNED		2	1					3	240	21
SUBTOTAL		2	1					3	240	21
OTHER CONCESSIONAIRE SITES			1					1	60	20
RECREATION RESIDENCE SITES	24	3						27	285	66
SKI AREA							11	11	60200	7755
OTHER WINTER SPORTS SITE				1				1	300	60
DOCUMENTARY SITE			1	1				2	300	19
INTERPRETIVE SITES (MAJOR)				1				1	250	10
INTERPRETIVE SITES (MINOR)		5	1					6	340	6
INTERPRETIVE SITES (ADMINISTRATIVE)	2							2	35	2
INFORMATION SITES	1							1	10	1
SUBTOTAL	3	5	1	1				10	635	19
FOREST DEVELOPED SITE TOTAL	59	76	39	21	10	1	15	221	85053	9251

FORM 2300-2C1 (CPO)　　　　RIM CENTER 7/07/82

A SUMMARY OF FOREST SERVICE DEVELOPED SITES
NUMBER, CAPACITY, AND SIZE AS OF 2/01/82

REGION-03　　FOREST-04　COCONINO N F　　DISTRICT-ALL

NUMBER OF SITES CLASSIFIED ACCORDING TO PERSONS AT ONE TIME CAPACITY

TYPE OF DEVELOPED SITE	UNDER 26	26 TO 75	76 TO 150	151 TO 300	301 TO 600	601 TO 1000	OVER 1000	TOTAL	TOTAL CAPACITY (PAOT)	TOTAL DEV.SITE ACRES
OBSERVATION SITES		2	1					3	210	7
PLAYGROUNDS,PARKS,SPORTS SITES		1				1		2	820	146
BOATING SITES	3	1	1					5	275	9
SWIMMING SITES			1	1				2	400	12
SUBTOTAL	3	1	2	1				7	675	21
FISHING SITE										
TRAILHEAD										
CAMPGROUNDS,FAMILY TYPE		8	4	7	1			20	2690	247
CAMPGROUNDS,GROUP TYPE		1	1	1				3	360	7
PICNIC GROUNDS,FAMILY TYPE	4	2						6	200	16
PICNIC GROUNDS,GROUP TYPE										
SUBTOTAL	4	11	5	8	1			29	3250	270
HOTELS,LODGES,RESORTS-FOR.SVC.OWNED										
HOTELS,LODGES,RESORTS-PRIVATE OWNED		1						1	64	12
SUBTOTAL		1						1	64	12
ORGANIZATION SITES-FOR.SVC.OWNED										
ORGANIZATION SITES-PRIVATE OWNED			3					3	335	38
SUBTOTAL			3					3	335	38
OTHER CONCESSIONAIRE SITES										
RECREATION RESIDENCE SITES	1	3	2					6	428	63
SKI AREA							1	1	1100	115
OTHER WINTER SPORTS SITE				1				1	175	20
DOCUMENTARY SITE	3							3	30	1146
INTERPRETIVE SITES (MAJOR)										
INTERPRETIVE SITES (MINOR)	1							1	20	1
INTERPRETIVE SITES (ADMINISTRATIVE)	1							1	7	1
INFORMATION SITES										
SUBTOTAL	2							2	27	2
FOREST DEVELOPED SITE TOTAL	13	19	13	10	1	1	1	58	7114	1840

1050

FORM 2300-201 (CPO) RIM CENTER 7/07/82

A SUMMARY OF FOREST SERVICE DEVELOPED SITES
NUMBER, CAPACITY, AND SIZE AS OF 2/01/82

REGION-05 FOREST-15 SIERRA N F DISTRICT-ALL

NUMBER OF SITES CLASSIFIED ACCORDING TO PERSONS AT ONE TIME CAPACITY

TYPE OF DEVELOPED SITE	UNDER 26	26 TO 75	76 TO 150	151 TO 300	301 TO 600	601 TO 1000	OVER 1000	TOTAL	TOTAL CAPACITY (PAOT)	TOTAL DEV.SITE ACRES
OBSERVATION SITES	2	1						3	60	4
PLAYGROUNDS.PARKS.SPORTS SITES										
BOATING SITES	8	9	3	1	1			22	1614	43
SWIMMING SITES										
SUBTOTAL	8	9	3	1	1			22	1614	43
FISHING SITE										
TRAILHEAD	4	2	2					8	410	24
CAMPGROUNDS.FAMILY TYPE	3	32	17	7	3	2		64	7460	457
CAMPGROUNDS.GROUP TYPE		1	5	1				7	890	32
PICNIC GROUNDS.FAMILY TYPE	4	5	6					15	900	37
PICNIC GROUNDS.GROUP TYPE				1				1	300	8
SUBTOTAL	7	38	28	9	3	2		87	9550	534
HOTELS.LODGES.RESORTS-FOR.SVC.OWNED										
HOTELS.LODGES.RESORTS-PRIVATE OWNED	1	5	4	1	2			13	1869	169
SUBTOTAL	1	5	4	1	2			13	1869	169
ORGANIZATION SITES-FOR.SVC.OWNED										
ORGANIZATION SITES-PRIVATE OWNED		2	7	10	1			20	3490	213
SUBTOTAL		2	7	10	1			20	3490	213
OTHER CONCESSIONAIRE SITES	4	8	1		1			14	952	85
RECREATION RESIDENCE SITES	2	6	4	3	4			19	2805	277
SKI AREA							1	1	2800	210
OTHER WINTER SPORTS SITE			1					1	100	2
DOCUMENTARY SITE										
INTERPRETIVE SITES (MAJOR)										
INTERPRETIVE SITES (MINOR)										
INTERPRETIVE SITES (ADMINISTRATIVE)	10	1						11	147	204
INFORMATION SITES	3							3	45	4
SUBTOTAL	13	1						14	192	208
FOREST DEVELOPED SITE TOTAL	41	72	50	24	12	2	1	202	23862	1769

Recreation Management funding for these forests for 1981, 1982 and 1983 follow:

Forest	1981 Actual	1982 Appropriated to Date	1983 Estimate
Wasatch	1,495,000	1,219,000	1,341,000
San Bernardino	1,819,000	1,514,000	1,665,000
Arapaho-Roosevelt	2,055,000	1,751,000	1,926,000
Tonto	785,000	778,221	856,000
Angeles	2,514,000	2,405,000	2,646,000
National Forest of North Carolina	837,000	743,000	817,000
Wenatchee	441,000	480,000	528,000
White River	1,630,000	1,271,000	1,398,000
Coconini	341,000	378,000	416,000
Sierra	1,560,000	1,581,000	1,739,000

You are requesting a $0.4 million increase for wilderness management.

Question: How will the increase allow "more intensive management and coordination" needed to prevent degradation of wilderness values?

Answer: The increase will allow Forest Service personnel to devote more time to wilderness management. This will give us the opportunity to hire additional seasonal personnel or pay expenses of Volunteers to carry out field duties.

Question: How many personnel are assigned to this program? Is that sufficient to manage the "nonconforming activities" you cite: unauthorized motor vehicles and aircraft trespass, permit non-compliance, etc.

Answer: The number of personnel assigned to wilderness administration varies wilderness-by-wilderness. It is estimated that at least one permanent full-time employee and two seasonal employees per designated area on the average, devote a portion or all of their time to wilderness administation. With 167 wilderness and primitive areas, this entails about 167 permanent and 334 seasonal employees.

This is generally sufficient to manage "nonconforming activities" but in other situations, it is inadequate. Problem areas will receive more staffing.

Question: How is the amount determined for wilderness surveys to be carried out by Geological Survey and Bureau of Mines for the Forest Service. Are the amounts budgeted under these agencies in 1983 adequate to meet your schedule?

Answer: In 1979, the Forest Service provided Geological Survey and Bureau of Mines with a total listing of the areas and acreages needing mineral surveys. Annually the Forest Service works with the two agencies to establish priority areas for study during the fiscal year. Geological Survey and Bureau of Mines then determine the scope of their field programs within the limits of available manpower and finances. The 1983 budgeted amounts are adequate to meet the highest priority area surveys established by agreement between the three agencies.

Wildlife and Fish Habitat Management

You are requesting $32.5 million for wildlife and fish, a decrease of $1.2 million. Management and support will be reduced by $0.5 million, to $18.0 million.

Question: How does the amount provided for timber support ($4.6 million) compare to 1981 and 1982?

Answer: Approximately $3.6 million and $4.5 million of timber support was provided in FY 1981 and FY 1982, respectively.

Question: How do "support activities" help to mitigate wildlife losses?

Answer: Wildlife and fisheries biologists help plan timber sales so these activities will cause minimum losses of habitat. Their involvement helps determine road locations, stream crossing type and location, size, shape, and location of patch cuts, stand prescriptions adjacent to streams, and timing of timber harvest activities. Biologists would be involved in all of these activities, as well as many others. If not properly planned, these activities can impact habitat and reduce wildlife and fish populations. Proper planning can often avoid losses or increase habitat carrying capacity and populations.

Question: Why is there a decrease in salary expenses, and an increase for contractual costs?

Answer: There has been a decrease in FTE ceilings from 992 to 896 (page 160 Explanatory Notes). The workload has not declined; therefore, more use of contracts, to meet objectives, is anticipated.

Wildlife habitat improvement will decrease by $0.5 million, to $7.1 million.

Question: What is the impact of focusing improvements only where there is timber or mineral activity?

Answer: Improvements will not be focused only on the timber and minerals area. There will be some increase in habitat carrying capacity in other areas. It should also be noted that the timber program itself improves habitat for certain species. The result of locating improvement projects in timber and minerals areas is that a significant increase in commodity outputs can be achieved without a net negative impact on wildlife and fish resources.

Question: Is your responsibility any less in non-timber, non-mineral areas?

Answer: Our responsibility is the same for all National Forest System lands. The opportunity to improve habitat or reduce potential losses is significantly greater in relationship to timber and minerals activities because of the amount of habitat effected by these programs.

Question: How many recovery projects for stabilized populations have been identified? What are the associated costs?

Answer: Following is a list of recovery projects for stabilized populations identified and the estimated cost of each:

Number of Projects		
1	Grizzly bear investigations	$ 5,000
1	Wolf habitat protection	2,000
4	Peregrine Falcon hacking, introductions	20,000
2	Osprey nest platform construction	2,000
2	Sensitive plant habitat improvement	6,000
		$35,000

Question: What is the impact of delaying them?

Answer: Accomplishment of recovery objectives will be delayed.

Range Management

Your request is $24.6 million, a reduction of $3.1 million. Forage and structural improvements will be funded at $0.7 million, a decrease of $2.1 million.

Question: What is the rationale for no longer using these funds for range improvements in the 16 western states?

Answer: Forests within the 16 western States will still have a range improvement program financed with $5.8 million of Range Betterment Funds.

Question: Why don't the eastern regions receive Range Betterment funds?

Answer: Authority for the Range Betterment Fund is the Federal Land Policy and Management Act of 1976 as amended by the Public Rangeland Improvement Act of 1978. These Acts restricted the collection for the Range Betterment Fund to 50 per centum of the moneys received as fees for grazing domestic livestock on lands in National Forest in the 16 western States. Such funds are to be credited to a separate account in the U.S. Treasury, one half of which is to be made available for use on the national forest from which such moneys were derived and one-half of which is to be made available for use within the region from which they were derived.

Funding for the wild horses and burros program is level with 1982 at $322,000.

Question: How many horses and burros were adopted last year?

Answer: 518 horses and burros were adopted last year.

Question: What other disposition was made of animals removed from the range?

Answer: Fifty-five head were destroyed because they were either sick, lame or too old.

Question: What is your position on the pending legislation to allow sale authority?

Answer: The Department of Agriculture is presently reviewing H.R. 5825 to determine its position on the proposed legislation. The "sale authority" in H.R. 5825 would appear to allow the Forest Service to sell excess animals for which an adoption demand by qualified individuals does not exist. The proposed legislation does not contain prohibitions as to whom the animals may be sold or for what purpose. Details would be established through regulation development with public involvement.

Your request for noxious farm weed control is $0.4 million, a decrease of almost 50%. 5000 acres will be treated, down from 21,600 in 1981.

Question: How will you be able to coordinate with local weed control districts at this reduced level?

Answer: These funds will be used for treating areas of highest priority to prevent invasion or reinvasion of National Forest System lands by noxious weeds. Our control efforts on priority land will be coordinated with local weed control programs on associated State and private lands.

Soil and Water Management

Your request is $23.9 million, a reduction of $9.0 million from 1982. This program is funded at the lowest percentage of the RPA goal of any NFS program: 31%.

Question: You state that one of the original purposes for establishing National Forests was to protect watershed conditions. Does this budget still adequately address the protection of watershed conditions?

Answer: The FY 1983 budget is adequate to ensure that all land management activities are conducted in such a way that watershed conditions are protected.

Your request for soil and water administration is $18.3 million, a decrease of $1.8 million.

Question: Why are you reducing the monitoring of effects of resource projects when timber and minerals activities are increasing?

Answer: The need to reduce Federal expenditures has forced difficult priority choices. For the soil and water program we believe we can achieve the highest degree of soil and water protection by first assuring that new damage does not occur or is immediately corrected if it does occur. This requires that we assign our soil and water expertise in support of the land disturbing activities such as timber harvesting, road construction, and minerals development, to assure that they are conducted in an environmentally sound manner. This type of monitoring will continue.

Monitoring will be reduced in other areas where the absence of a few years record at a long-term station will not invalidate the previous investment.

Question: How much of the 1983 program will be for timber and minerals support?

Answer: Direct support to timber sale planning is $6.3 million. Direct support to minerals is $1.1 million.

Question: What are the impacts of failing to meet the time requirements imposed by various western states for acquisition of Federal water rights?

Answer: Availability of water is necessary to the management of national forest programs such as recreation, range, and fish and wildlife habitat. Failure to meet time requirements established by State law or court direction will result in the loss of right to use water for many of these purposes in States where waters are already fully appropriated. In States where water is not fully appropriated, failure to meet time requirements will result in loss of important priority dates.

Your request for soil and water improvements is $0.3 million, a decrease of $1.5 million. 400 acres will be accomplished compared to 5,580 in 1982.

Question: You have identified 290,000 acres in declining condition. What level of activity could be accomplished in 1983 toward restoring the productivity of those acres? At what cost?

Answer: It is our goal to have all lands within the National Forest System in good watershed condition. Toward this end we engage in a dual program of prevention and improvement. The prevention activities receive the highest priority, as they serve to preserve valuable public lands from deterioration. Improvement activities in the form of land restoration address those areas already in a declining condition. The FY 1982 program level could be continued in FY 1983. However, these efforts must be postponed until economic conditions improve.

You are requesting $5.2 million for soil and water inventories, a decrease of $5.7 million. Management planning and long-term timber harvest scheduling will be based on information already available.

Question: Is that information adequate for the purposes stated? What impacts is its use likely to have?

Answer: Inventories are available to an intensity level adequate for broad land allocation decisions on 75 percent of National Forest System lands.

Inventories are available to an intensity level adequate for timber harvest scheduling and other more specific resource management decisions on approximately 25 percent of the area.

The impacts are that project planning cost will increase for individual projects located in areas where inventories are not available. In some cases, a higher degree of risk may be taken by implementing projects without the standard soil and water information provided by inventories. However, funding constraints have made it necessary to prioritize programs and provide a greater proportionate share of the funding to those programs that will achieve the most in economic returns. The FY 1983 request emphasizes soil and water support to ensure resource outputs in the 1983 timber program which is higher priority than doing additional inventories.

General Administration

Your request for general administration is $260.7 million, an increase of $11.3 million, and 88% of the RPA level.

Question: The request for line management is $39.4 million, the same as the 1983 base, but an increase of $2.3 million, or 6%, over 1982. Can you explain this increase to the base, specifying the difference between the increase for the Washington Office (9%) and field offices (6%)?

Answer: The line management component of General Administration will remain constant unless an administration unit that has line management personnel is closed (or opened) or a reorganization occurs. No change of this nature is anticipated for FY 1983.

The 9% increase in Washington Office line management is due to the lifting of the pay cap and increase in personnel benefits. Except for secretarial personnel, all line management officials in the Washington Office were directly affected by the pay cap lift.

The field increase (6%) was less than the Washington Office increase because the majority of those individuals were only affected by the pay act increase.

Question: What is the average salary for the Washington Office? The field offices?

Answer: The average annual salary for all employees in the Washington Office is $31,570. The average annual salary for all field people is $20,500.

For program support, the request is $129.6 million, a decrease of $4.4 million from the 1983 base, but an increase of $3.4 million over 1982.

Question: Can you explain how the increases to 1983 base levels were derived, and the basis for different treatment of the Washington and field offices?

Answer: The $3.4 million increase over 1982 is a result of adding $7.8 million for Service-wide pay act costs and the reduction of $4.4 million for decreased program support which is primarily tied to the reduced research program and field office closures. The reductions are all in the field because the reduced research programs and field office closures are located outside the Washington area.

Included under program support is an office which oversees your Volunteers and Host Employment programs.

Question: In what way are funds from "benefitting activities" used to support the use of volunteers?

Answer: Benefiting function funds are used to fund incidental expenses for volunteers. These expenses include, travel, per diem, supplies, safety equipment, and other work related items.

Question: How much was used for this purpose in 1981, and from what sources?

Answer: An estimated $125,000 was used for this purpose in 1981. Funds came from regular budgets in areas where these volunteers work such as reforestation, timber stand improvement, habitat improvement and recreation.

Question: What are your estimates for 1982 and 1983?

Answer: 1982 and 1983 will probably see an increase to $210,000 or more because of the increased effort to use volunteers to reduce overall Federal costs while producing goods and service to the public.

Under Computer Science, Communications, and Data Management, you discuss a National Facilities Needs Analysis, which describes the information processing requirements for the National Forest System programs for 1983-86.

Question: What is the total amount you estimate will be required for this purpose?

Answer: The delegation of procurement authority from USDA is $75 million.

Question: Does this represent entirely new capabilities, or replacement of existing systems? What are the estimates for each?

Answer: This project will provide our district offices the capability to perform word processing, data entry and edit, and generate reports locally. The forest and regional headquarters will have this capability, plus local data management, data processing, and communications with Departmental Computer Centers and other Forest Service units. This total capability does not exist today. Most units have some word processors and data entry devices. There are a few minicomputer systems. The distributed processing systems will be implemented on an incremental basis over a 4-year period. Therefore, any existing systems will be fully utilitized for their entire systems life.

Question: If applicable, what is the cost of the current capability that you intend to replace and the justification for replacement? Provide details for the record.

Answer: No existing system will be replaced before the end of its system life. Therefore, the value to the Government at the time of replacement will be minimal.

Question: What is included in your 1983 request for this purpose? Provide details, including source of funds, for the record.

Answer: The estimated level of implementation in fiscal year 1983 for the Forest Level Information Processing Systems is $18 million. Funding will be from the following benefitting programs:

1983
Estimate of FLIPS Budget
Line Item Responsibility

	Revised 1983
Research	390
State & Private Forestry	0
National Forest Service	
Minerals	290
Land Management	350
Land Line Location	300
Maintenance of Facilities	160
Forest Fire Protection	1,760
Road Maintenance	720
Trail Maintenance	90
Timber	2,200
Reforestation and Stand Improvement	1,160
Recreation	1,400
Wildlife and Fish Habitat Management	380
Range	350
Soil and Water	350
General Administration	3,000
TOTAL National Forest System	(12,510)
Construction of Facilities	200
Road Construction	3,350
TOTAL Construction	(3,550)
Permanent & Trust Funds	1,550
TOTAL	18,000

The base amount for Accounting, Fiscal Management and Law Enforcement is $1.8 million, for 52 FTE's.

Question: How much of these totals are for the law enforcement functions? Is this adequate, considering the problems cited in the GAO report?

Answer: Currently, $176,000 and four FTE's are assigned to the law enforcement activity at the National level. The source of funding is general administration. We believe that this assignment is appropriate and adequate.

In the field, criminal investigation and other law enforcement work is paid for from funds available for the resource activity in which the work is taking place. For example, law enforcement work by the Forest Service to prevent and investigate theft of national forest timber is paid for from funds appropriated to protect and utilize the timber resource. Only in those circumstances where investigations are general are costs paid from general administration funds.

Question: Will any of the proposed 1983 decrease affect this activity?

Answer: The decrease in general administration proposed for 1983 will not affect the law enforcement activity in the Forest Service. If the increase proposed for the Cooperative Law Enforcement program is approved, we anticipate a higher level of law enforcement services to the visitor of the national forest than at the present level.

Question: How much is included in your request for Energy Coordination? For coordination of defense and emergency operations?

Answer: The 1983 request for Energy Coordination, within the Forest Service, is $141,173.

Approximately $35,000 is budgeted in general administration for the Washington Office to cover expenses of one specialist who helps to coordinate defense and emergency operations at the national level. Forest Service responsibilities in defense and emergency operations, as required by Executive Order 11490 and related laws and regulations, are also coordinated by designated field personnel. Field costs are covered by regular Forest Service program appropriations and average approximately $10,000 per region annually for administration and coordination.

Question: Are these functions also handled at the departmental level?

Answer: Yes, but the Department coordinates activities between agencies within the Department and between the various Departments, such as the Department of Energy. USDA also coordinates defense and emergency operations within the Department and with other Departments. The requested amount in the Forest Service budget is only to fulfill the agency responsibilities.

Your proposed reduction in Program Support from the 1983 base is $4.4 million, and 100 FTE's.

Question: How many positions does that represent?

Answer: Since some of the involved positions would be part time, the total staffing reduction would be approximately 114 positions.

Question: What are specific details as to how this reduction will be applied, and which offices and activities will be affected?

Answer: The reduction will fall entirely in research program support and will result from the reduction of the total research program. Reduction will occur at all research field locations where most of the program is carried out.

You are requesting $91.7 million for common services, an increase of $15.7 million, or 21%.

Question: For each category, what is the basis for the amount of expected increase on which you are basing your request? Provide specific details, if necessary.

Answer: The estimated increase in common services is based on the following:

> Rents - The increase of $2.85 million results from office and other space rental increases plus general General Service Administration's, Standard Level User Charge (SLUC), increases. Our best service-wide estimate is a 20% increase over 1982. For example, the Atlanta Regional Office lease is

being renewed with the price rising from $7.07 to $9.50 per square foot; the Milwaukee Regional Office very likely will move into a new Federal building which will increase their rate from $8.36 to $22.00 per square foot; and the Rosslyn, Virginia office space cost will increase from $10.10 to $19.15 per square foot.

Utilities - The $600 thousand increase is based on a field estimate of approximately a 10% utility rate increase plus the fact, as space leases are renewed utlities are generally excluded rather than being included as was fairly common in old leases.

Federal Telecommunications System - The new billing procedure leveys charges on a "per minute" basis. This is expected to increase current rates 68% or a $3.88 million increase based on USDA estimates of cost.

Mail - These costs are expected to rise $838 thousand due to increases in metered mail rates and an expected 5% increase in volume.

Distributed Data Processing Equipment - This increase of $3 million is the GA share of the distributed processing network for computer processing and operational efficiency increases.

Office of Worker's Compensation Programs - The $1.5 million increase is based on planning guidance from the Department of Agriculture. This reflects estimated cost increases associated with survivor benefits, medical services, and other benefits.

National Finance Center - The $3 million or 20% increase is based on planning guidance from the Department of Agriculture.

Question: What is the total cost of the distributed data processing equipment, of which GA is paying a $3.0 million share? What is the purpose of this equipment?

Answer: Estimated obligations for all facets of distributed processing are $25.2 million in fiscal year 1983. The Forest Level Information Processing System will be the major component at $18.0 million. Procurement for plotting and for intelligent graphics systems will constitute most of the remainder. The Forest Level Information Processing Systems will provide our district offices the local capability of performing word processing, data entry and edit, and report generation. The forest headquarters and regional offices will have this capability plus local data management and data processing to complement the capabilities of the Fort Collins Computer Center. The graphics systems will provide interactive graphics and digitizing not provided for by the Forest Level Information Systems.

Question: Where is the funding for the balance?

Answer: Funding will be from benefitting program areas.

Question: Why is the Forest Service share of the National Finance Center cost of such a high percentage (45%)?

Answer: The Department bases their National Finance Center (NFC) assessment on the previous year's actual volume of documents processed, by agency. The Forest Service has the largest payroll, voucher payments, billing/collections and accounting needs of the Department. This is why the Forest Service contributes such a large share towards NFC's cost of operation.

Question: Which other agencies contribute?

Answer: Every agency of the Department has the potential for an National Finance Center assessment. If, however, their useage is small in relation to the total, no assessment is made.

Question: What is the total annual cost for 1981, 1982, and 1983, and how is it split among all the agencies who share the cost?

Answer: The following tables reflects the NFC cost distribution for fiscal years 1981, 1982 and 1983.

National Finance Center
Estimated Costs FY 1981

Agency	Percent	FY 1981 Amount
Agricultural Cooperative Service	.03	$ 9,558
Agricultural Marketing Service	1.75	557,548
Animal and Plant Health Inspection Service	4.24	1,350,858
Agricultural Stabilization and Conservation Service	1.57	500,200
Departmental Administration	.98	312,227
Economics & Statistics Service	1.34	426,922
Foreign Agricultural Service	.34	108,324
Federal Crop Insurance Corporation	.88	280,367
Federal Grain Inspection Service	3.33	1,060,934
Farmers Home Administration	7.01	2,233,377
Food and Nutrition Service	1.31	417,364
Forest Service	44.13	14,059,760
Food Safety and Quality Service	9.32	2,969,340
Office of General Counsel	.16	50,976
Office of General Sales Manager	0.00	0
Office of International Cooperation and Development	.10	31,860
Office of Inspector General	.53	168,857
Office of Secretary	.08	25,488
Office of Transportation	.01	3,186
Rural Electrification Administration	.34	108,324
Soil Conservation Service	13.64	4,345,686
Science and Education Administration	8.89	2,832,342
World Food and Agriculture Outlook and Situation Board	.02	6,370
Department Total	100.0	$ 31,859,868

Source: Department's Working Capital Fund Assessments Notebook, November, 1980.

National Finance Center
Estimated Costs FY 1982

Agency	Percent		FY 1982 Amount
Agricultural Cooperative Service	0	$	0
Agricultural Marketing Service	1.58		471,316
Animal and Plant Health Inspection Service	4.35		1,297,612
Agricultural Stabilization and Conservation Service	1.56		465,350
Departmental Administration	1.00		298,301
Economics Management Staff	1.43		426,571
Foreign Agricultural Service	.30		89,490
Federal Crop Insurance Corporation	.87		259,522
Federal Grain Inspection Service	3.55		1,058,970
Farmers Home Administration	5.94		1,771,911
Food and Nutrition Service	1.41		420,605
Forest Service	44.73		13,343,027
Food Safety and Quality Service	9.67		2,884,580
Office of General Counsel	.16		47,728
Office of International Cooperation and Development	.11		32,813
Office of Inspector General	.54		161,083
Office of Secretary	.08		23,864
Office of Transportation	.01		2,983
Rural Electrification Administration	.31		92,473
Soil Conservation Service	13.59		4,053,918
Science and Education Management Staff	8.79		2,622,070
World Agriculture Outlook Board	.02		5,966
Department Total	100.0	$	29,830,153

Source: Department's Working Capital Fund Assessments Notebook, August, 1981.

National Finance Center
Estimated Costs FY 1983

Agency	Percent	FY 1983 Amount
Agricultural Cooperative Service	.10	$ 37,118
Agricultural Marketing Service	1.58	586,465
Animal and Plant Health Inspection Service	4.34	1,614,633
Agricultural Research Service	7.74	2,869,222
Agricultural Stabilization and Conservation Service	1.56	579,041
Cooperative State Research Service	.14	48,254
Departmental Administration	1.00	371,180
Economics Management Staff	.12	40,830
Economic Research Service	.56	207,861
Extension Service	.18	70,524
Foreign Agricultural Service	.30	111,354
Federal Crop Insurance Corporation	.86	322,926
Federal Grain Inspection Service	3.55	1,317,689
Farmers Home Administration	5.92	2,197,385
Food and Nutrition Service	1.42	523,364
Forest Service	44.73	16,602,880
Food Safety and Inspection Service	9.66	3,589,310
National Agricultural Library	.16	63,100
Office of General Counsel	.16	59,389
Office of International Cooperation and Development	.12	40,830
Office of Inspector General	.54	200,437
Office of Rural Development Policy	.02	7,423
Office of Secretary	.08	29,694
Office of Transportation	.02	3,712
Rural Electrification Administration	.32	115,066
Soil Conservation Service	13.58	5,044,336
Science and Education Management Staff	.46	174,454
Statistical Reporting Service	.76	282,097
World Agriculture Outlook Board	.02	7,426
Department Total	100.0	$ 37,118,000

Source: Department's preliminary estimates for Working Capital Fund charges - March, 1982.

Construction for Fire, Administration and Other Purposes

Your request for construction for fire, administrative and other purposes is $16.1 million, an increase of $3.8 million.

Question: You are requesting $111,000 for health and safety planning and design regionwide in California. For what year will these projects be designed? Why is this done for only one region?

Answer: Construction funding for projects planned and/or designed with these funds will be requested in fiscal years 1985 and 1986 depending on budget priorities.

California's health and safety needs are greater than most other regions because of a significantly larger number of facilities and the higher useage they receive. This emphasis in California is a special effort to address these health and safety problems. Other regions include health and safety planning and design costs in their general planning request or as a part of a group of smaller project such as the project, "Rehabilitation of Potable Water Systems" in Montana and Idaho.

Question: Has planning and design been completed for all projects for which construction funding is requested?

Answer: On the major projects, planning has been completed through the preliminary plan stage before construction funding is requested. Additional costs for the final plan and design are usually built into the construction cost estimates. On smaller projects where we have good data, planning, design, and construction costs are requested at one time.

Question: For each project for which Phase I funding is included (Idaho City, Deerfield Admin. Site, Kokanee), what is the total estimated cost?

Answer: The Phase I funding and estimated total project cost as of January 1, 1982 follows:

Project	FY 1983 Phase I	Total Cost
	(thousand dollars)	
Idaho City Administrative Site	$ 462	$ 1,500
Deerfield Administrative Site	475	900
Kokanee Work Center	739	3,000
Redding Emergency Service Center	4,058	10,658

Question: Why are advance planning and design funds included for only 3 regions? What is the basis for the estimate for each region?

Answer: Pre-construction costs are handled differently depending on the specific need and planning concepts used in each region. Some regions request planning, survey, and design funds by specific funds. This is usually done only for major construction. Others include these costs with the construction request. Others may request planning and design funds separately.

The three regions for which separate planning, survey and design costs are requested base their estimate on the cost of planning and designing projects for which they will request construction funds two or three years hence.

Question: You are requesting $4.1 million for the first phase of reconstruction of the Redding (Calif.) Emergency Service Center, destroyed in a plane crash and fire in May 1981. What is the total estimated cost, and the schedule for completion?

Answer: The project is planned in several phases as a joint cost-sharing venture with the State of California, Department of Forestry (CDF):

Increment I (planned for FY 1983) This includes the operations building to house the joint Forest Service/CDF dispatcher office, fire cache, and smokejumper loft.	$ 4,058
Increment II (planned for FY 1984 if funding is available) To construct the administration building which will house the Forest Service/CDF offices, training facilities, conference rooms, fireweather forecaster, space for 80 transient firefighters, electronic support and visitor's services.	$ 3,800
Increment III (as funding becomes available) Design and reconstruct air tanker base.	$ 1,500
Increment IV (as funding becomes available) Complete site development and construct facilities for aviation unit, storage and fuel.	$ 1,300
Total Projected Forest Service cost as of January 1, 1982	$10,658

Question: Will this facility be an exact replacement of the destroyed facility, or an enlargement? Provide details of the proposed project for the record.

Answer: The proposed development of the Redding Emergency Service Center will be an enlargement of the facilities which were in place before the accident and fire. This project, as now planned will be a joint construction effort with the California Department of Forestry (CDF) to replace the facilities lost in the May 11, 1981 fire and augment them with joint administrative offices, training facilities, smokejumper base, relocated airtanker base, and CDF fire station. Costs will be shared on pro-rated basis.

The Shasta-Trinity National Forest began to develop the Northern California Service Center in 1961 at the Redding Airport as a Fire Cache, Zone Fire Dispatch Office, Training Facility, Smokejumper and Hotshot Crew Base and Aviation Unit with numerous other support activities. The California Department of Forestry and the Forest Service operate a joint airtanker retardant base on the 40 acre site that is in serious need of major reconstruction or relocation. The CDF faces relocation of its regional office headquarters and ranger unit headquarters in downtown Redding, and the two agencies have for some time considered combining their dispatch functions into a common facility. The CDF must also construct a forest fire station near the Redding Airport. The National Oceanic and Atmospheric Administration's weather bureau, was permited to use space beginning in 1962, under the Economy Act in exchange for fire weather forecasting services.

The Redding Emergency Service Center is the hub of fire suppression in disaster support for Northern California. It serves six CDF ranger units in 15 counties, 11 national forests, plus California lands managed by the Bureau of Land Management, National Park Service, and other agencies. During major fire incidents, it expands to function as a multi-agency command center. The aviation unit, airtanker base, smokejumpers and hotshot crews provide initial attack and reinforcement strength nationwide.

This Center is very complex because of the number of activities carried out and the amount of interagency cooperation needed to meet its objectives. It has operated effectively before the disaster because of the ability to group these talents and facilities at one site.

Recreation Construction

Your request for recreation construction is $4.5 million, a decrease of $0.4 million and 17 FTE's.

Question: Why does recreation construction receive a relatively lower priority than other construction?

Answer: It is not intended that recreation construction be given lower priority. Regional foresters compile their total construction needs which include recreation as well as fire, administrative and other. However, Federal spending is being reduced in order to effectively deal with the Federal deficit and inflation. The most serious problems are being targeted in the President's Budget.

Question: What is the total backlog or requirements in this category?

Answer: The total backlog of recreation restoration and rehabilitation projects is $1.1 billion. This includes existing sites plus heavily-used areas, trails, recreation-related roads, cultural resource sites, and Government-owned improvements under special use permit.

As the entire Forest Service budget for FY 1983 (both appropriated and other) is about $2.1 billion, it is obvious that only the most important requirements can be funded at any time in the foreseeable future. The Forest Service has recognized this in the FY 1983 budget. In most, but not all cases, the projects will correct health and safety deficiencies.

Question: How much of this is for health and safety?

Answer: According to our survey, $421 million has been identified to rehabilitate the presently existing recreation facilities to place them in a safe, sanitary, and satisfactory condition. These facilities range from numerous small scale projects costing a few hundred dollars to large projects costing several million dollars.

Question: Will all the facilities identified be able to meet Land and Water Conservation Fund (L&WCF) Act requirements as a result of the requested projects?

Answer: No, the recreation projects listing in the 1983 Explanatory Notes are identified to meet health and safety requirements but not necessarily to meet the requirements of the L&WCF Act. Some of these projects, when meeting health and safety requirements, then become eligible as fee sites. However, our objective is to maintain sites to a level that meets the needs of the public which in many instances does not equate to the criteria in the L&WCF Act.

Question: What are the total dollar requirements to bring all of your recreation facilities up to LWCF standards?

Answer: The present L&WCF Act specifically precludes charging for facilities other than at campgrounds and swim sites. There are many campgrounds at remote sites which are not managed to meet the requirements of the L&WCF Act. Also, there are numerous developed sites that are managed to a more natural environment and while meeting the safety and health requirements for the forest visitor, do not qualify as a fee site. It is intented they be managed to these standards, both from the public's preference and from the aspect that the cost of administering many of these sites to L&WCF requirements are excessive and not cost beneficial. For these reasons, Forest Service accounting and budgeting procedure do not identify needs for L&WCF purposes and we are unable to specifically answer the question. However, we estimate that it would cost $50 to $60 million in Recreation Use Construction to bring all recreation facilities up to the criteria in the L&WCF Act, even though it would not be desirable to do so. An additional $20 million annually would be needed in recreation operation and maintenance funds to meet L&WCF requirements such as visitor protection and trash collection.

Question: Do you have an estimate of the total increase in user fees this would result in?

Answer: Under existing legislation, we would expect to collect about $15 million in 1983 from recreation fee sites if all recreation facilities were brought up to the requirements of the L&WCF Act. In 1981, $8.5 million was collected. If some of the requirements of the L&WCF Act were modified, more revenue could be generated by the current recreation program with no construction requirements beyond those contained in the budget.

Question: You are requesting $1.0 million for Mount St. Helens. What specifically does this project involve? Is this the total funding required?

Answer: The recreation construction request for Mount St. Helens is for $1.036 million. This is for the following activities:

- $165,000 for planning,
- $400,000 for land acquistion for Visitor Information Center and,
- $471,000 for construction for 13 viewing points, 3 portals and expansion of existing sites to partially replace those lost at Spirit Lake.

Future requests for funding will depend upon the recreation priorities and volcanic conditions at the time.

Question: What does the project entitled Design and Inspection of High Hazard Dams involve?

Answer: This project includes planning, design and reconstruction of two dams that have identified safety deficiencies based on previously completed safety inspections.

Question: Have you identified high hazard dams in other regions?

Answer: Yes, the following is the current status of inventory by hazard class:

Region	No. of Dams by Hazard Class		
	High	Moderate	Low
Northern	35	45	27
Rocky Mountain	138	245	151
South Western	17	41	0
Intermountain	132	136	118
Pacific Southwest	162	405	0
Pacific Northwest	32	41	38
Southern	31	0	163
Eastern	30	98	36
Alaska	7	4	6
Total	584	1,015	539

The above listing is for dams that are included in the national inventory of dams prepared by the Corps of Engineers. It does not include the approximately 15,000 additional dams on National Forest System lands that are less then 25 feet in height or store less then 50 acre-feet of water.

Question: What is the extent of the problem?

Answer: Based on June 1982 costs and trends, it is estimated that the costs associated with corrections of safety related deficiencies on Forest Service owned dams, identified with respect to the "Federal Guidelines for Dam Safety," are about $13 million:

Region	State	Number of Dams	Cost
Northern		0	0
Rocky Mountain	Colorado	17	2,150,000
	Nebraska	1	25,000
	South Dakota	13	3,260,000
	Wyoming	3	985,000
Southwestern	Arizona	4	450,000
	New Mexico	1	75,000
	Texas	1	1,100,000
Intermountain	Utah	21	650,000
Pacific Southwest	California	7	875,000
Pacific Northwest	Oregon	2	260,000
Southern	Arkansas	1	150,000
	North Carolina	1	50,000
Eastern	Illinois	1	30,000
	Missouri	2	100,000
	West Virginia	2	20,000
	Wisconsin	1	10,000
Alaska		0	0
Planning, design and construction engineering			2,700,000
		Total estimate	12,890,000

Road Construction

Your request for road construction is $271.6 million.

Question: How much is included for recreation road construction? How does this compare to 1981 and 1982?

Answer: Of the $271.6 million request, $7.8 million is for recreation road construction. In FY 1981, the dollars for recreation road construction were $7.4 million and in FY 1982 the dollars for recreation road construction were $5.4 million.

Question: Do you have a backlog or total estimate of what such requirement are?

Answer: Our estimate of potential construction and reconstruction of recreation roads is approximately $220 million. The FY 1983 Budget recognizes the compatability of recreation and timber road construction. Many of the improvements in access to the national forest lands for recreation purposes can be achieved through the timber program. Many of these roads for recreational purposes are of low priority and would not represent wise investment of Federal funds at this time.

Question: Are any funds included to complete construction of a road to the Zilpo point recreation area on Cave Run Lake in Kentucky? How much has been expended for this purpose so far? What is the remaining balance and your plans for completing construction?

Answer: No funds are included in the 1983 Budget for the Zilpo Point Recreation Area road. Access to the Zilpo Point Recreation facilities involve 5¼ miles of Road 129 and 8¼ miles of Road 918. To date, 3¼ miles of Road 129 have been constructed and paved in 1981 through cooperation with the State. The Forest Service shared by contributing $543,708. The remaining 2 miles are scheduled for reconstruction in FY 1986.

Base and pavement for the remaining 8¼ miles of Road 918 is scheduled for accomplishment in FY 1985 when the Corps of Engineers will program $1,025,000 and the Forest Service will program $800,000 to complete the project.

Question: What changes have you made with regard to road construction standards?

Answer: The standard of road being constructed has been reduced by several management decisions. We are not constructing very many multi-purpose roads. The double-lane roads being built are on our arterial and, in some special cases, on our collector roads. We are constructing single purpose roads which are strictly managed, e.g., no recreation traffic is allowed during logging operations. This allows us to construct single-lane rather than double-lane roads. By restricting the season of use, e.g., log hauling permitted during the dry season only, we have been able to reduce the depth of base and surfacing required.

Question: What are your current estimate of costs per mile? How does this compare to prior years?

Answer: Average cost per mile for road construction is as follows:

FY 1981	$78,500/mile
FY 1982	$76,100/mile
FY 1983	$80,300/mile

The above cost per mile figures are all based on 1981 dollars.

Question: Are you satisfied that your current procedures will allow you to avoid reconstruction requirements where the road will have future uses (timber sales or recreation)?

Answer: No. Some roads being constructed by timber purchasers are only designed for the individual timber sale and will require later reconstruction to be adequate for public use or for future timber sales.

Land Acquisition

For the second year in a row, you are requesting no funding for Weeks Act land acquisition.

Question: What impact has the lack of funding in 1982 had?

Answer: Some land line location and right-of-way acquisition expenses will be incurred that could have been avoided if tracts had been purchased.

Question: Do you anticipate any additional impacts in 1983?

Answer: The impacts will be similar to the impacts identified for fiscal year 1982.

For the Land and Water Conservation Fund your request to the Department and to OMB for land acquisition was $36,063,000. The OMB allowance was $7,563,000.

Question: Why are FTE's being reduced from 80 to 21?

Answer: The 1983 figure of 21 in the Explanatory Notes has been revised. When the full time equivalents were calculated for this program, full consideration was not given to the minimum level needs to accomplish the existing program. The revised figure is 74 full time equivalents.

Question: How much of the request of $7,563,000 is for acquisition management?

Answer: Four million dollars is for Acquisition Management funds and $3.563 million is for payment of deficiencies inholdings if all funds are not needed to pay excess awards. The $4 million of Acquisition Managagment funds will be used for:

1. Closing cases initiated in previous fiscal years. Approximately $22 million from fiscal year 1982 appropriation and $16 million of carryover funds will be obligated for acquisition cases in fiscal year 1982. A large part of the case work for these acquisitions (title work, closing procedures, filings, etc.) will be done in fiscal year 1983 using Acquisition Management funds.

2. Case processing expenses associated with the acceptance of donations of land.

3. Support services to the Department of Justice for court preparation work on condemnation cases filed in previous fiscal years.

4. Developing alternatives to fee acquisition. This includes negotiating acquisition of land and interests in land by donation, land exchange, and working with States and local goverments to use their authority to protect important recreation and wildlife habitat values.

5. Processing fiscal year 1982 carryover funds. Participate with Department of the Interior in overall planning, budgeting, and administration of the National Land and Water Conservation program.

Question: How will the balance of the request be used?

Answer: The balance will be used to meet the most critical court deficiency awards and to make cash equalization payments for land exchanges where the land being acquired meets the criteria for acquisition with Land and Water Conservation Funds.

Question: What are the acquisitions that would have been made at the level requested of the Department and OMB?

Answer: The following projects were included in the Agency Request.

	State	No. of Cases	No. of Acres	Cost
Arapaho NRA	CO	4	660	5,000,000
Sawtooth NRA	ID	14	2,970	5,000,000
Cascade Head SRA	OR	2	142	500,000
Wild & Scenic Rivers:				
Pere Marquette	MI)	8	1,852	5,000,000
MF Feather	CA)			
MF Clearwater	ID)			
MF Flathead	MT)			
Salmon	ID)			
Boundary Canoe Area Wild.	MN	8	120	3,000,000
River of No Return Wild		13	425	2,500,000
Other Wilderness		15	11,383	6,500,000
Deficiencies & Inholdings		10		2,563,000

Acquisition Management funds are included in the above figures at this level.

$6,720,000 was provided in 1982 for Lake Tahoe land acquisitions.

Question: How much of that has been obligated to date?

Answer: No funds have been obligated for the purchase of lands to date. The final Environmental Impact Statement was completed on March 29 and 500 letters have been sent to landowners asking if they would be interested in selling. An appraisal contract will be awarded soon for the properties that owners have indicated they would like to sell.

Question: How much do you expect to obligate in 1982?

Answer: We expect to obligate all of the money that has been appropriated by the end of fiscal year 1982.

Question: What are you capable of acquiring in FY 1983?

Answer: The Forest Service, is capable of continuing the FY 1982 level of land acquisition which is $6,720,000.

A total of $26,262,000 was appropriated in FY 1982 for land acquisition.

Question: How much has been obligated to date for each area for which funds were provided?

Answer: The following is a list of line item appropriations and obligations:

Area	Appropriations	Obligations
Eleven Point W&SR	$ 1,440,000	$ -0-
M.F. Salmon W&SR	288,000	1,800
Other High Priority W&SR	480,000	40,000
Spruce Knob-Seneca Rocks NRA	1,248,000	1,244,809
Sawtooth NRA	3,840,000	-0-
Other High Priority NRA	480,000	-0-
Lake Tahoe Basin	6,720,000	-0-
Appalachian Trail	2,112,000	195,620
BWCAW	2,400,000	839,410
Daniel Boone NF Composite	288,000	53,150
Nicolet NF Composite	480,000	-0-
Other High Priority Composites	1,507,200	1,208,772
California Condor Habitat	312,000	-0-
Kirtland Warbler Habitat	76,800	-0-
Habitat Management Allegheny NF	84,480	-0-
Nicolet NF	195,840	-0-
Deficiencies and Inholdings	480,000	203,162
Acquisition Management	3,829,440	1,914,720
Total	$26,261,760	$ 5,701,443

The obligations do not include several recent court awards. One in the Sawtooth NRA is in excess of $2,000,000.

Question: Have any funds been frozen?

Answer: No funds have been frozen. All Forest Service Funds are available to carryout the programs approved in the 1982 Appropriations Act.

Permanent Appropriations

Your estimate of timber salvage sales funds is $7.9 million, a decrease of $4.8 million. This will allow a program level of 0.3 BBF, down from 0.8 BBF in 1982; but the total salvage volume will remain at 1.3 BBF.

Question: Does this mean you will increase salvage sales funded from regular appropriations? If so, why, and what is the funding associated with the increase?

Answer: Increased salvage sales will be funded from regular appropriations. An aggressive salvage sale program will increase the harvest and utilization of timber lost due to fire, insects, diseases, and other natural causes. Regions will adjust their targets between live and salvage so that salvage efforts will be maintained. Of appropriated funds, $9.76 million will be used in connection with timber sales salvage programs.

Trust Funds

You estimate a total 1983 level of $116.5 million for Knudsen-Vandenburg funds for reforestation, TSI, and related work, including wildlife habitat.

Question: Does this amount represent the total that will be available in 1983 for these purposes?

Answer: Yes, the amount has now been collected or will be collected and available for 1983.

Question: Do you place a ceiling on K-V fund spending levels? Why? Who determines what the ceiling should be?

Answer: K-V expenditures are a part of the total Forest Service outlays and therefore, a part of the total budget. Whenever possible, the total authorizations requested by the regions are included in the budget. Any ceiling imposed is during the same process for determining national priorities for all Forest Service programs.

Question: What happens to the remainder of the funds?

Answer: K-V collections remain available until expended unless it is determined that available funding exceeds the work remaining to be completed.

Question: Do you also place a ceiling on the amount of Cooperative Work funds that can be spent each year? Why?

Answer: The Cooperative Work expenditures are also part of the total Forest Service budget and as such, are part of the overall constraint on Federal spending and employment. Whenever possible, the authorizations requested by the regions are included in the budget and every effort is made to avoid limiting these expenditures of our cooperators deposits.

You have indicated that $77 million will be spent in 1983 to build roads in roadless, non-wilderness areas.

Question: What portion of that amount will come from the direct appropriation for road construction, and what portion will come from timber purchaser credits?

Answer:	Direct appropriation	$66.0 million
	Timber Purchaser Credit	$11.0 million

National Forests in Western Oregon and Washington

Question: For each national forest in Western Oregon and Washington, what are acres of Douglas fir type stands by nonstocked, seedling-sapling, poletimber and sawtimber stands?

Answer: The following table shows the Douglas-fir type on the National Forests in Western Oregon and Washington:

Acres of Douglas-fir Type by Stand Size
(Thousand Acres)

National Forest	Nonstocked	Seedling-Sapling	Poletimber	Sawtimber
Gifford Pinchot	32.4	68.5	37.1	414.9
Mt. Baker-Snoqualmie	3.4	25.7	25.8	229.8
Olympic	6.5	33.1	34.9	119.0
Rogue River	15.7	11.6	4.8	201.3
Siskiyou	11.2	17.6	24.1	360.1
Siuslaw	12.4	23.6	4.9	269.7
Umpqua	28.7	82.8	7.2	530.9
Willamette	11.4	74.5	18.2	569.1
Mt. Hood	5.4	42.4	75.0	233.7

Question: What size trees are in each of the above categories?

Answer: The following size trees are included in each of the categories:

Stand Size Classes

Sawtimber stands = Conifers 9.0 inches and larger. = Hardwoods 11.0 inches and larger.

Poletimber stands = Conifers 5.0 - 8.9 inches. = Hardwoods 5.0 - 10.9 inches.

Seedling and sapling stands = less than 4.9 inches.

Nonstocked stands = Seedlings not established.

Question: For sawtimber acres can you show these broken down by average size tree for stand acres with trees 10-15" diameter breast high (dbh), acres with trees 15-20" dbh, etc.?

Answer: The following table shows number of acres (thousand acres) by size groups of the Douglas-fir type sawtimber stands:

Acres of Douglas-fir Type by Diameter Class
(Thousand Acres)

National Forest	Sawtimber	9.0-16.9	17.0-28.9	29.0+
Gifford Pinchot	414.9	141.1	170.1	103.7
Mt.Baker-Snoqualmie	229.8	42.7	78.4	108.7
Olympic	119.0	14.5	34.2	70.3
Rogue River	201.3	40.8	59.0	101.5
Siskiyou	360.1	63.4	90.7	206.0
Siuslaw	269.7	54.7	88.5	126.5
Umpqua	530.9	102.5	174.1	254.3
Willamette	569.1	82.5	169.0	317.6
Mt. Hood	233.7	64.3	79.9	89.5

Question: For sawtimber stands can you show by age class 50-100 years, 100-50 years, etc.?

Answer: The following table shows the number of acres of Douglas-fir type (thousand acres) by age class:

Acres of Douglas-fir type by Age Class
(Thousand Acres)

National Forest	Sawtimber	50-100	101-150	151-200	210-299	300+
Gifford Pinchot	414.9	193.8	84.6	35.7	32.8	68.0
Mt. Baker-Snoqualmie	229.8	105.2	40.2	36.3	39.3	8.8
Olympic	119.0	24.7	32.4	4.8	34.3	22.8
Rogue River	201.3	51.5	10.3	10.4	88.8	41.3
Siskiyou	360.1	52/6	20.9	31.3	153.8	101.5
Siuslaw	269.7	161.6	97.1	9.4	1.6	0
Umpqua	530.9	66.9	63.2	24.4	123.2	253.2
Willamette	569.1	154.2	116.7	37.6	72.9	187.8
Mt. Hood	233.7	100.0	14.0	43.7	48.1	27.8

Question: What proportion of the stands are "Douglas-fir type?"

Answer: The following table shows the percentage of "Douglas-fir type" on National Forests in Western Oregon and Washington:

National Forest	Percentage of Western Oregon and Washington Sawtimber Stands that are DF Type
Gifford Pinchot	53
Mt. Baker-Snoqualmie	42
Olympic	33
Rogue River	55
Siskiyou	60
Siuslaw	54
Umpqua	77
Willamette	56
Mt. Hood	51

Question: What percentage of the Douglas fir type are that species and what percentage of composition is other species (show by name and volume)?

Answer: There are no inventory data which can be aggregated on a forest or regional basis which will provide a meaningful response. However, regional records for fiscal year 1980 and 1981 show the following timber harvest from the Douglas-fir zone. One could expect that constituent percentage of Douglas-fir in stands of the Douglas-fir type is higher than that shown in the following table:

Percent of Species Harvested from the Douglas-fir Zone

	Douglas-fir	Western Hemlock	True Fir	Other Species
Western Oregon and Washington National Forest	55	19	9	17

Question: What percentage of timber sold is Douglas fir? What percentage of the total inventory for each forest is Douglas fir?

Answer: The following table summarizes percentage of Douglas-fir that was sold in FY 1980, the latest year of verified data, and the percent of total inventory by forest in Western Oregon Washington as of October 1, 1981:

National Forest	Percent Sold which is Douglas-fir	Percent of Inventory which is Douglas-fir
Gifford Pinchot	55	49
Mt. Baker-Snoqualmie	29	22
Olympic	33	31
Rogue River	51	42
Siskiyou	85	75
Sisulaw	84	74
Umpqua	80	70
Willamette	75	65
Mt. Hood	47	56

Question: Is the sale and cut of Douglas fir heavier than the other species?

Answer: For Western Oregon and Washington, fiscal year 1980 and 1981 about 61 percent of the softwood volume sold and 55 percent of the softwood volume cut was Douglas-fir. The average percentage of forest inventories which is Douglas-fir is about 54 percent. Therefore, while the total volume of Douglas-fir harvested is higher than other species, it is proportional to inventories. Harvest volumes may vary from year-to-year depending upon market conditions and other factors.

Automatic Data Processing

You are proposing to develop an extensive distributed computing system.

Question: What are the full life cycle costs of this system broken out by such categories as equipment, personnel, conversion, site preparation, etc., and by fiscal year?

Answer: The costs of the procurement for the Forest Level Information Processing System is estimated to be $75 to $80 million. This total includes equipment, software, training, and other support. The implementation will be completed over a four year period. Estimated costs for each fiscal year are as follows:

	FY 83 $	FY 84 $	FY 85 $	FY 86 $
		(dollars in millions)		
Site preparation	.7	1.2	1.1	.8
Conversion	2.8	—	—	—
Travel and technical support	.2	.1	.1	.1
Contract costs	18.0	18.0	18.0	18.0
Total	$21.7	$19.3	$19.2	$18.9

Question: What is the schedule for development and implementation of this system?

Answer: We are now procuring these systems. The request for proposals was advertised on March 6, 1982. The first installations are planned for the 3rd quarter of fiscal year 1983. Total implementation is expected in 4 years.

Question: Your ADP explanatory notes indicated FY 1983 obligations for this system of $15.8 million, yet in your regular explanatory notes we can only find a request of $3 million under general administration. Can you please explain the difference in these amounts? What is the full budget authority request for FY 1983?

Answer: The $3 million mentioned in the general administration section in the 1983 Explanatory Notes is the cost assigned only to general administration. The balance of the funding ($22.2 million) will come from benefiting functions.

The $15.8 million shown in the 1983 ADP Explanatory Notes is the increase from fiscal year 1982. When this amount (15.8 million) is added to the 1982 budget ($9.4 million), the total is

$25.2 million. This includes $21.7 million for the Forest Level Information Processing System and $3.5 million for other distributed processing.

The Forest Level Information Processing Systems will provide our district offices the local capability of performing word processing, data entry and edit, and report generation. The forests headquarters and regional offices will have this capability plus local data management and data processing to complement the capabilities of the Fort Collins Computer Center. Graphics systems will provide interactive graphics and digitizing not provided for by the Forest Level Information Systems.

Question: Please describe the requirements analysis process you went through to arrive at the particular system design you are proposing. For example, how was it determined that word processing and electronic mail would be cost-effective for each location in which it is planned?

Answer: Forest Service information processing needs were examined and the report, National Facilities Needs Analysis, was issued in May 1980. This study, in addition to analyzing the Forest Service requirements, evaluated four different alternatives and recommended the integrated distributed processing approach. The cost effectiveness of placing word processing/data entry/edit/electronic mail facilities at the Forest and District level was documented in the report, Cost Effectiveness of Region 5 DEC PDP 11 Systems, April 1981.

Question: What impact upon the Ft. Collins Computer Center will this system have?

Answer: The Forest Level Information Processing Systems will provide the ranger districts with stand alone capability to perform word processing, data entry and edit, and report generation functions. Each forest headquarters and regional offices will be able to perform these functions plus the capability for management of local data and some local data processing. All systems will be able to communicate with the Fort Collins Computer Center. With most interactive functions performed at the district or forest level, the Fort Collins Computer Center (FCCC) workload should be predominately batch. This will not impact upon the FCCC.

Question: What is the role of the Department in the planning and development of this system?

Answer: The USDA Office of Operations and Finance, Data Services, has participated in the planning and development of this project since June 1980. They have been included in the evaluation of requirements, development of specifications, and participated in the review of vendor responses to the first pre-release of the Requests For Proposals. They also helped in the development of the cost-benefit analysis and the live test demonstration package. They plan to participate in the evaluation of proposals and implementation as members of those teams.

Question: What is the management mechanism you plan to use for developing the system and for later operating it?

Answer: The existing Forest Service management approach will be used to ensure effective and efficient utilization of this information processing and resource to meet the highest priority needs of the land manager. The issuance of policy, standards, and guidelines by line management will provide the necessary guidance for the forest supervisor and district ranger to manage these systems. The program review process along with controls built in the systems will provide the tools necessary for the regional foresters and the Chief to evaluate the level of effectiveness of the systems.

Question: How will you avoid a proliferation of non-standard, "home-grown" applications on the new equipment?

Answer: The Forest Service policies pertaining to software management establish the framework for line management involvement in determining that all software development is necessary and cost-beneficial to support the units program objectives. It is through this process that the line manager at each organizational level is held accountable for the effective utilization of this information processing resource.

Question: How will you avoid "re-inventing the wheel" in different locations?

Answer: To assist the line manager in carrying out the responsibilities described in the previous answer there is currently a Forest Service software inventory on the Fort Collins Computer Center. This system will be expanded to include applications of a distributed nature. Before any development of any software, the user must review the inventory to determine if a similar system already exists.

Question: What will be the disposition of the existing word processing data entry, and electronic data communication equipment?

Answer: The Forest Level Information Processing Systems will be implemented over a 4-year period. The implementation schedules will include plans for reutilization of existing equipment. Under no circumstances will any piece of existing equipment be replaced before the end of its systems life.

Question: In your ADP explanatory notes you show an increase of $1,564,000 for inflation. Upon what base is this increase, and what percentage are you using?

Answer: The $1,564,000 increase shown in the ADP Explanatory Notes is a total for systems and applications whose individual between year changes are less than $100,000 each. These are grouped as "all other" pursuant to Appendix M of the ADP Explanatory Notes. Inflation has contributed to the increase shown here and has been calculated at a 10 percent rate. Other increases have resulted from increases in costs of software development and ADP contract administration.

Question: You show an increase of approximately $2.1 million for voice telephone incurred in order to save energy and travel dollars. How much do you plan to save?

Answer: The increase projected in fiscal year 1983 dollars is not totally attributable to efforts related to teleconferencing. Our activities in fiscal year 1983 in teleconferencing will be experimental to determine the applicability of such an activity to save fuel and travel dollars. These activities have accelerated in an effort to satisfy our mission in the face of constraints in travel and fuel dollars. In fact, most of the fiscal year 1983 increase (90-95 percent) will be absorbed due to projected tariff increases and the deregulation activities that will be taking place.

Question: You plan to acquire software evaluation tools for the Ft. Collins Computer Center. What specifically, are these tools and how is the Department involved in their acquisition and use?

Answer: The software evaluation tools we are looking for are a dynamic analyzer or an instrumentation package that will analyze ASCII-77 FORTRAN programs. The Fort Collins Computer Center (FCCC) will assist us in the evaluation and acquisition of this software. FCCC will also either assume full maintenance responsibility or assist us in the maintenance of this software.

QUESTIONS SUBMITTED BY CONGRESSMAN LES AuCOIN

Shifting of Research Funds

Question: Are there any plans to shift research funds for range and wildlife research from LaGrande, Oregon to any other location in the Northwest?

Answer: Some program redirection is planned in fiscal year 1983 due to the overall reduction in range and wildlife research funding and emerging high priority research needs in the Pacific Northwest. For example, the range evaluation program in LaGrande will be terminated in FY 1983 due to funding reductions in National Forest System range management, State and Private Forestry and Research. Research will be increased to address major westside problems in the Northwest on how to manage high valued old growth that also functions as wildlife habitat.

Soil & Water Funds

Question: How much of the soil and water budget support the timber program? The minerals program?

Answer: Direct support to timber sale planning is $6.3 million. Direct support to minerals is $1.1 million.

Question: Your budget justification statement indicates there are 290,000 acres of National Forest land in declining condition in terms of watershed values. What would be needed to correct this condition by the end of this century?

Answer: To treat the 290,000 acres by the year 2000 would require a program of 16,000 acres per year, and would require $6 million annual funding. Such a long term commitment would be undesirable. Soil and water projects are investments whose returns need to be weighed against other investment opportunities before funding decisions are made. The FY 1983 budget represents an appropriate level of soil and water resource improvements when viewed in this light.

Question: Your soil and water inventory goals continue to decrease. In addition to what is now programed, how much could be accomplished by people you presently have on board?

Answer: Many of the people who have been working on soil and water inventories are needed to handle the increasing timber and minerals program. With this shift in personnel it would be difficult to increase soil and water inventory work with present staffing and accomplish the planned timber and minerals programs.

Timber Stand Improvement

Question: Wouldn't you agree that, in this time of slack harvesting, it would be prudent to do more in the way of Timber Stand Improvement (TSI)?

Answer: Timber Stand Improvement is an investment that can be deferred. Except for the direct labor involved, contributions in strengthening the economy in the short run are limited. Additional TSI would not be as cost-effective and would represent an average cost per acre that is considerably greater than the average cost reflected in the President's Budget.

Question: Isn't TSI mostly contractual work?

Answer: Yes. It is estimated that 75 to 80 percent of all TSI is by contract.

Question: Provide for the record the TSI capability of the Forest Service for FY 1983 on a region by region basis and, for Region 6, on a forest by forest basis. Include the costs associated with that available if the capability were fully funded.

Answer: The attached two tables summarizes the timber stand improvement capability by regions and for the national forests in Region 6. The total additional costs to perform the additional stand improvement work on 106,000 acres would be approximately $16,200,000, or $153 per acre. These are lower priority areas with lower cost/benefits. TSI work must be concentrated on those sites with the highest potential for future growth and the highest economic returns. It would be inappropriate to put public funds into such projects while funding of other government programs has a higher priority within existing spending constraints.

COMPARISONS - FY 1983 TSI PROGRAM BY REGIONS

Regions	1	2	3	4	5	6	8	9	10	Total Acres
FY 1983 Appropriated	4,000	7,000	18,000	6,000	10,000	55,000	35,000	17,000	8,000	160,000
FY 1983 K-V	7,500	13,000	38,000	9,000	24,000	32,000	10,000	8,500	—	142,000
Total FY 1983 President's Budget	11,500	20,000	56,000	15,000	34,000	87,000	45,000	25,500	8,000	302,000
Total Capability	18,400	30,600	56,000	18,000	46,000	125,000	58,000	48,000	8,000	408,000
Additional Capability above FY 1983 Budget	6,900	10,600	—	3,000	12,000	38,000	13,000	22,500	—	106,000

COMPARISONS - FY 1983 TSI PROGRAM - REGION 6
Individual Forests

	FY 1983 Appropriated	FY 1983 K-V	Total 1983 President's Budget	Total Capability	Additional Capability Above FY '83 Pres.
Deschutes	3,840	2,240	6,080	8,740	2,660
Fremont	2,680	1,560	4,240	6,100	1,860
Malheur	2,200	1,280	3,480	5,000	1,520
Mt. Hood	1,130	650	1,780	2,550	770
Ochoco	2,190	1,280	3,470	4,980	1,510
Rogue River	3,300	1,920	5,220	7,500	2,280
Siskiyou	6,050	3,520	9,570	13,750	4,180
Siuslaw	7,150	4,160	11,310	16,250	4,940
Umatilla	550	320	870	1,250	380
Umpua	3,860	2,240	6,100	8,760	2,660
Wallowa-Whitman	2,210	1,280	3,490	5,020	1,530
Willamette	4,950	2,880	7,830	11,250	3,420
Winema	2,830	1,640	4,470	6,410	1,940
Colville	1,650	960	2,610	3,750	1,140
Gifford Pinchot	2,810	1,640	4,450	6,390	1,940
Mt. Baker-Snoqualmie	2,720	1,590	4,310	6,200	1,890
Okanogan	1,070	630	1,700	2,450	750
Olympic	2,710	1,570	4,280	6,150	1,870
Wenatchee	1,180	640	1,740	2,500	760
Total	55,000	32,000	87,000	125,000	38,000

Mount St. Helens Salvage Operations

Question: I know that you project the Mount St. Helens salvage operations to be on schedule, but tell me precisely what effect the lack of a fixed rate on certain species will have on eventual receipts.

Answer: At this point, we do not know exactly what the effect of placing the bid premium of certain species wil have upon the final receipts. Receipts are dependent upon how rapidly each sale is harvested, how rapidly the entire volume is released for harvest, how quickly each species deteriorates and other environmental factors that wil influence the rate of log removal. We do know that the longer it takes to offer, sell and harvest the salvageable material the greater the likelihood of reduced receipts. Volume reductions have already begun to accelerate into the 25-30% range for many species, such as hemlock. This will certainly reduce the amount of volume removed and lower the actual receipts from the estimated values.

Question: Please provide for the record a detailed report on the salvage operation and what you anticipate revenues to be at the end of fiscal years 1983 and 1984.

Answer: The Mount St. Helens salvage sales are progressing on schedule. Salvage operations are planned or underway on 18,000 acres with volumes totaling 945 million board feet. Of 54 planned sales, 30 have been sold with a total volume of 479 million board feet, and the remaining 24 sales with a total volume of 465 million board feet will be sold by September 1982. To date, 40 million board feet has been harvested.

Three sales offered in February of this year did not receive bids. These sales with a volume of 5 million board feet were severely deficit helicopter sales. They will be redesigned and reoffered later this year.

Four sales are currently under appeal by the Mount St. Helens' Protective Association. This organization would like the acreage in these sales added to the National Volcanic Area. No decision has been made to date on these appeals. Currently, hearings are being held and legislative proposals are being drafted to create a National Volcanic Area somewhat larger (100-100,000 acres) than the area proposed by the Forest Service (85,000 acres). The size of this final proposed boundaries of the Volcanic Area will have a substantial influence upon the volume of salvageable material that is removed. This could mean as much as 2-300 million board feet less salvageable material.

The total value of the timber to be harvested from the Mount St. Helens area was projected to be approximately $63 million by FY 1983 and to be $93.4 million by the end of FY 1984. This does not include the value of the roads and bridges that have to be restored. The longer it takes to resolve the boundary issues, the greater the likelihood that the total receipts will be reduced by as much as $20-25 million for the 2-300 million board feet that is within the affected boundary change area.

Reforestation Trust Fund

Question: The Reforestation Trust Fund is financed by tariffs on imported lumber products. How much is in the fund at the present time and describe how it would be activated?

Answer: The fund balance as of February 28, 1982, was $64,159,804. In order for the fund to be activated, the following sequence would occur: (1) A request for a supplemental appropriation would be made by the Secretary of Agriculture for a specified amount to be spent from the fund. (2) This request would be for an amount not to exceed the difference between the amount appropriated for that year and the amount needed to reach the RPA level of work. Use of the fund would have precisely the same undesirable affect on the level of Federal spending as an increase in reforestation expenditures of the same amount above the President's Budget.

Cyclocrane

Question: The Forest Service has contracted with Aerospace Corp. for a study of the Cyclocrane, operated by AeroLift, Inc. of Tillamook, Oregon. What is the status of that initial study? Provide for the record a description of the Cyclocrane and its potential capability in our Nation's forests. To what degree is the Forest Service interested in the Cyclocrane? Will a more complete study be required of the Cyclocrane? Estimate the cost of that study?

Answer: A Cyclocrane study (to develop evaluation requirements and costs to assess the Cyclocrane's economic utility for timber harvest) was completed by the Aerospace Corporation. They estimate the costs to perform such assessment will range between $1.1 million and $1.3 million. A proposal for a similar study has been submitted by Aerolift, Inc. which estimates assessment costs at $788,000.

The Cyclocrane is a 2-ton demonstration model heavy lift airship which combines a blimp for static lift with four aircraft engines for dynamic lift. The blimp rotates around a 135' shaft that passes horizontally through the blimp. Four engines attached to wings cause the blimp to rotate around the shaft generating lift. The Cyclocrane is designed so that the helium filled blimp lifts one half of the load (1-ton) and the engines lift the remaining 1-ton for a total lift capacity of 2-tons.

The Forest Service currently has a similar concept called the Heli-stat. This is a full sized air ship with a 26-ton capacity. Successful fabrication and testing of the Heli-stat will provide guidance for land use plans now being developed. The Forest Service feels the Heli-stat is more comparable to its needs than the Cyclocrane. The Cyclocrane is a 2-ton model. It would have to be scaled up to full size for effective testing. The time and costs involved do not fit our budget and/or schedule for integrating this technology into land use plans currently underway. In addition, the extra costs runs counter to the Administration's efforts to achieve a reduction in the growth of Federal spending and reducing the Federal deficit.

Land Acquisition for Cascade Head Scenic Research Area

Question: In the Supplemental Bill for fiscal year 1981, the Congress included funding for the acquisition of the Dilworth property so that it might be added to the Cascade Head Scenic Research Area. The deed changed hands in August of 1981. It is my understanding that, last year, an additional ten offers to sell tracts in the same area were made; but no money was available to complete the transactions. Provide for the record details of the offers that were made. How much would it cost to acquire those ten tracts?

Answer: The following table summarizes the information we have on the offers to sell:

Name of Owner	Acres	Appraised Value
Glerup	2.12	$110,000
Bruno	41.05	184,400
Church Z.	38.39	156,000
Morley	66.27	183,000
Moore	0.28	8,000
Gunn	0.58	18,000
Montague	0.56	18,000
Edwards	0.15	5,500
Courgil	0.42	16,000
Ferguson	0.28	8,000
Total	150.10	$706,900

Question: How many tracts must be acquired to complete acquisition for the Cascade Head Scenic Research Area?

Answer: There are 32 more tracts to acquire to complete acquisition. This counts the 42 acres owned by Three Rox, Inc., as one tract. This tract was previously subdivided into substandard lots. If the tract is replotted into lots that meet local zoning requirements, we will have a total of between 50 and 60 tracts to acquire.

Question: How many total acres are we talking about? What is the estimated cost of acquiring all the necessary property?

Answer: We estimate an investment of $1,635,000 would be required if the remaining 1,799 acres of land were purchased.

QUESTIONS SUBMITTED BY CONGRESSMAN CLARENCE D. LONG

Question: I am concerned about the extent of Gypsy Moth infestation in Maryland especially Baltimore and Hartford counties and throughout the northeastern United States. In view of your proposed cuts in insect and disease management funds, how do you intend to contain the gypsy moth and prevent it from damaging more trees?

Answer: Our primary role will be that of technical assistance and coordination to the States. State and local governments and private landowners will have the major role in financing, coordinating, and carrying out gypsy moth suppression activities on State and private lands.

Question: What is the long-term effect of failure this year to control the gypsy moth?

Answer: Because gypsy moth populations can fluctuate so much from year to year, the long-term effect of failure to control the gypsy moth in any one year cannot be predicted. In general, however, it can be expected that repeated defoliation of trees by the gypsy moth will eventually kill many of the trees and reduce the oak component of the eastern hardwood forest, thereby changing the present forest stand composition.

Question: What is your estimate of total suppression needs for fiscal years 1982 and 1983 for the gypsy moth in dollars and acres requiring treatment? How does this compare with the amount allocated for FY 1982 and requested for FY 1983 for gypsy moth suppression activities?

Answer: In fiscal year 1982, Federal financial assistance was requested by the northeastern States for suppression of gypsy moth on 1,232,532 acres. The estimated total cost for this suppression was $15,323,657. The amount made available for the Federal share of cooperative gypsy moth suppression in 1982 is $3,614,000. No funds for cost-sharing in cooperative gypsy moth suppression programs are included in the FY 1983 budget. States local governments and landowners are expected to assume responsibility for suppression on non-Federal lands.

Question: How does the gypsy moth infestation problem compare in scope with other major pests such as the spruce budworms and bark beetles?

Answer: In 1981, aerial surveys detected gypsy moth defoliation on about 12.8 million acres. Defoliation by the spruce budworms in the eastern and western parts of the United States was about 9.1 million acres in 1981. Mountain pine beetle infestation in the western United States occurred on approximately 4.3 million acres in 1981, while southern pine beetle populations have been greatly reduced.

Question: Why wasn't a supplemental budget request for additional pest suppression funds made for fiscal 1982, when it became apparent that funding was inadequate to meet all suppression needs?

Answer: No supplemental appropriation was requested because of the need to reduce Federal spending and rely on States, local governments, and private interests to assume greater responsibility for such actions.

Question: Why didn't you inform the States sooner that the Federal cost-share for insect suppression projects would be reduced from the 47% level assumed in the budget to 12½% to allow the States to make adequate adjustments in their budget?

Answer: The States were notified as soon as the final decision was made. Delay in the decision was caused by the late date of enactment of the 1982 Appropriations and the time required to obtain detailed outbreak information for determining national forest pest suppression priorities.

Question: Your budget request emphasizes that "only the highest priority pest suppression, using primarily conventional technology will be done." What does this mean? Have conventional suppression technologies worked to curb the pest?

Answer: The statement in the budget request means that suppression projects will be carried out in those areas where the affected forest resource values are highest and are in immediate danger of insect or disease attack. Conventional suppression methods, such as pesticide applications, reduce epidemic pest populations buildups or reduce susceptibility of forest stands to damage. Conventional suppression technologies use time-tested, less expensive tactics as opposed to utilizing newer, often more expensive, integrated pest management tactics.

Question: Is there an insecticide specific for the moth which is sufficiently toxic and that will not endanger wildlife or other insects?

Answer: Of the insecticides that are registered to control the gypsy moth--acephate, carbaryl, diflubenzuron, trichlorfon, methoxychlor, phosmet, Bacillus thuringiensis, gypsy moth nucleopolyhedrosis virus (NPV), and disparlure--only the pheromone (disparlure) and NPV are specific entirely to gypsy moth and, therefore, have no impact on other wildlife. Based on our current understanding of how to use pheromones, disparlure is ineffective as a control agent on any but very low populations. Efficacy of the NPV has been disappointingly erratic but we believe this is more a function of unsolved formulation and application problems than toxicity of the virus to gypsy moth.

Of the remaining insecticides, the bacterium Bacillus thuringiensis poses the least potential danger to wildlife since it is only toxic to certain insect caterpillars. However, it has not proven to be as effective in controlling gypsy moth populations as carbaryl, diflubenzuron, acephate, or trichlorfon, primarily because of its short residual life. Since gypsy moths normally hatch over an extended period of time, an insecticide needs to remain active for one or two weeks to be effective or multiple applications need to be made.

All of the registered chemical insecticides are sufficiently toxic to control gypsy moths. However, they all have some impact on other insects or wildlife. For example, carbaryl and acephate are quite toxic to bees, acephate and trichlorfon are slightly toxic to birds, and diflubenzuron is toxic to some aquatic invertebrates. These differences in effectiveness and potential for adverse environmental impact are important in selecting the proper treatment for specific situations. Any insecticide can be used safely, but there are certain situations that dictate the choice of one insecticide over another.

Question: I understand that Maryland has been selected by the U.S. Forest Service as the State in which a Federally-funded Gypsy Moth integrated pest management demonstration project will be conducted. Does your fiscal year 1983 budget request include funding for this project? What is the proposed level of funding? What will the project accomplish?

Answer: The budget contains $432,000 in FY 1983 for the Forest Service share of the project. The Maryland integrated pest management demonstration is a cooperative project between Maryland, the Animal and Plant Health Inspection Service (APHIS), and the Forest Service. The project objectives are to demonstrate ways to reduce the severity and frequency of outbreaks and retard natural and artificial spread. Achievement of these objectives will depend on the support of all cooperators.

Question: Do you have any intention of lifting or easing quarantines to prevent the movement of infested goods and materials that might spread the gypsy moth to other areas?

Answer: The Forest Service has no responsibilities for quarantine activities. The gypsy moth quarantine activities are the responsibility of the USDA, Animal and Plant Health Inspection Service (APHIS). We understand that APHIS has announced that the gypsy moth quarantine will be lifted at the end of FY 1982.

Question: What are the estimated number of acres that will need to be treated in FY 1983?

Answer: It is too early to make a very reliable estimate at this time. Defoliation is still occurring in the 1982 outbreak areas. The extent and severity of this damage will affect 1983 needs. In the past, about 10 percent of the defoliated area has required treatment. This could mean that about 1,300,000 acres will require treatment during 1983.

Question: What is the total estimated cost for gypsy moth treatment in FY 1983 and what would the Federal share of these costs be at 12.5, 25, 33, and 47 percent?

Answer: Based on the estimate that 1,300,000 acres would require treatment, the total costs would be about $20 million. Federal cost-share would be $2,500,000 at 12.5 percent, $5,000,000 at 25 percent, $6,600,000 at 33 percent, and $9,400,000 at 47 percent.

Question: When the FY 1983 budget was submitted, how much was programed for gypsy moth? How much is currently planned?

Answer: No funds for gypsy moth control, except for a special integrated pest management project in Maryland, were in the budget as submitted. Except for the Maryland project, there are no current plans to fund gypsy moth control work during FY 1983.

Question: How much money was earmarked for gypsy moth treatments in Maryland in the FY 1983 budget as originally submitted? And how much of this will be used to pay overhead costs?

Answer: A total of $432,000 is earmarked in the Forest Service budget for a special integrated pest management project in Maryland. About 5 percent of this will be used to pay Forest Service overhead costs attributed to this project.

Question: How much money is APHIS contributing to the gypsy moth control program in FY 1983?

Answer: The FY 1983 APHIS budget for gypsy moth includes $673,000, all to be used for methods development work.

Question: What was the total acreage treated for gypsy moth control in FY 1981 and the total costs?

Answer: A total of 350,300 acres were treated in 1981 under the Federal cooperative control program in the States of Maine, New Jersey, New York, Pennsylvania, and Rhode Island. Total costs were approximately $4.9 million. A total of $2,188,633 in Federal cost-share payments were made to the States.

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QUESTIONS SUBMITTED BY CONGRESSMAN NORMAN D. DICKS

Question: Does the Forest Service plan to contract for additional air tankers for the 1982 fire season, which many people expect to be a very serious one in light of the optimal growing conditions for underbush and similar fire fuels?

Answer: The Forest Service does not anticipate a need for additional airtankers for the 1982 fire season. The 43 airtankers we have contracted for appear to be adequate for this fire season. Cooperating bureaus of USDI have 10 more airtankers, and the State of California can furnish 22 more, if needed.

The above normal rainfall and snowpack throughout the Western United States currently leads us to believe the 1982 fire season will be about normal in fire severity. The above normal precipitation will increase the growth of grass and brush species making more burnable fuel available; however, the new growth provides for a more succulent and fire resistant plant. Currently, our fire activity is about 30-45 days behind normal. The day-to-day weather conditions of late June and early July will be the most significant factor on what type of fire season to expect.

Question: What steps has the Forest Service taken to develop a consistent long-range approach to ensure adequate reliable air tanker fire protection?

Answer: The Forest Service is conducting an Airtanker Needs Assessment for the next 3-year contract period (FY 1983-85). This analysis will take into consideration economic efficiency, ten years of past fire history, airtanker need patterns in FY 1978-82, anticipated cooperator participation, and alternative fire suppression force capabilities.

Question: In 1975, the Forest Service contracted for almost 7,800 days on mandatory availability of air tankers fire protection. Today, that figure is roughly 4,700 days — a decrease of 40 percent. Does the U.S. Forest Service intend to restore the level of initial air attack fire protection to its former strength?

Answer: We do not anticipate our airtanker strength will ever return to the 1975 numbers. There are several reasons for this: (1) Today, the airtanker needs are determined on an interagency balanced mix of all our fire protection resources. Since 1975, we have completed a budget analysis which provides for a more cost efficient fire protection program based upon the expected year; (2) The Forest Service has revised its fire policy to require the preparation of an escaped fire situation analysis which establishes the fire suppression objectives for that specific fire; and (3) Overall cooperative effort in planning and

scheduling of airtanker service nationwide. The coordinated efforts between the Forest Service regions has allowed us to contract for 43 airtankers to provide adequate coverage of 51 airtanker bases, thus reducing the need for 51 airtankers. One example is: A B-26 begins the season March 1st in Knoxville, TN, moves on to Albuquerque, NM May 15, and closes out the season in Missoula, MT from June 12 to September 15. In past years, this would have involved three short term contracts.

Question: The Forest Service has requested an increase of $2.1 million in the Fire Aviation program. Specifically, what will these funds be used for? Should some of the increase be used to restore these past cuts in air tanker fire protection?

Answer: The funds will be used to hold the number of aircraft in the fire management program at the same level as in 1982. Clauses on renewals of contracts for both airtankers and helicopters provide for escalation of availability payments according to an index which is running about 8 percent. New contracts and rental agreements for other fire aircraft services such as crew transport, fire detection, and smokejumping are expected to be bid at about this same increase over 1982. None of the increase should be used to increase the number of airtankers. The availability period for airtankers can be extended if needed under contract provisions. If extension is necessary, it will be paid from available funds.

Question: The Forest Service has requested an additional $5.2 million in the Fire Attack program to restore past cuts in the number and days of mandatory availability of ground tankers. In light of previous concern over similar cuts in the air tanker program, should some of that increase be used to restore the air tanker program?

Answer: The Forest Fire Protection request also included a $2.1 million increase in the aviation program. This increase in funds would be used to hold the number of aircraft in the fire management program at the same level as in 1982. The $5.2 million would bring the ground attack program nearer to the level of the airtanker program. The Forest Service does not have a mandatory availability requirement for ground tankers. The increase in dollars would be used to adequately crew the ground tankers and pay for increased operating costs.

Timber Sale by Region

Question: The FY 1983 budget proposes timber sales of 12.3 billion board feet — up 1.3 billion board feet from FY 1982. How many board feet will be sold in each region?

Answer: The following chart shows the timber sales volume by Regions:

FY 1983 TIMBER SALES VOLUME DISTRIBUTION BY REGIONS

National Total	12,300 Million Board Feet
Regions	
1	1,210
2	390
3	460
4	420
5	2,000
6	5,340
8	1,270
9	720
10	490

Road Construction

Question: How much funding has been requested for the construction of logging roads? How many miles of roads will be constructed? How do these numbers compare to FY 1981 and FY 1982?

Answer:

	FY 1981 Actual	FY 1982 Est.	FY 1983 Est.
Forest Service Road Construction	$ 217,361	227,600	263,800
Timber Purchaser Road Construction	210,000	242,542	268,834
Total	$ 427,361	470,142	532,634
Miles	12,353	12,536	12,357

Timber Supply

Question: Could you tell the Subcommittee what you believe should be done over the next decade to insure that the small mill owners in the Pacific Northwest have an adequate supply of timber?

Answer: The Forest Service will continue to work with the Small Business Administration to ensure that a fair proportion of national forest timber will be available to small business concerns. The amount of the fair proportion shall be based on a 5-year purchase history. Some small business concerns may not purchase what they consider an adequate supply of timber from the set-aside sale programs. These firms will have to purchase additional timber to meet their needs.

Mount St. Helens Operations

Question: How much funding has been requested for salvage operations at Mt. St. Helens? How much for visitors activities? For roads?

MOUNT ST. HELENS TIMBER SALVAGE PROGRAM
FY 1983

	Million $
Timber Sale Preparation and Administration	$ 1.130
Timber Support	.534
Road Maintenance	1.840
Fire Protection	1.095
Soil and Water Improvements	.191
Reforestation	1.120
Forest Road Construction	6.430
Subtotal	$12.340

VISITOR ACTIVITIES FY 1983

Interpretive Services, including operation of visitor center, Public Interpretation programs and roadside interpretive services trails and support facilities	2.590
State and private technical assistance	.010
Research projects	.150
Total	$15.090

Sales Program Costs

Question: Would you provide for the record the costs of the sales program? (i.e. the costs of roads, administration, sales preparation etc.)

Answer: The following chart shows the 1983 timber sales program:

1983 TIMBER SALES PROGRAM

National Forest System:	Million Dollars
Timber Management	135.5
Harvest Administration	52.8
Timber Support:	
Minerals	1.3
Land Line Location	19.8
Forest Fire Protection	2.9
Road Maintenance	34.4
Recreation	9.1
Wildlife and Fish	4.6
Range	.5
Soil and Water	6.3
Road Construction:	
Forest Service Construction	252.7
Purchaser Construction	(268.4)*
Purchaser Roads Construction by Forest Service	44.9
Subtotal, Road Construction	297.6
Special Accounts:	
Brush Disposal	50.7
Timber Salvage Fund	7.9
Tongass Timber Supply Fund	41.5
Total, Timber Sales Program	664.9

*Figure is not included in total.

Cloning of Trees

Question: Would you describe generally what research the Forest Service is doing in the field of cloning of trees?

Answer: Forest Service research is directed toward improving the methods for cloning of genetically improved and desirable trees. Major areas of research are directed toward improving the rooting of cuttings from mature trees by the development of improved physical systems, i.e., moisture and temperature controls during rooting, and by the development of more effective rooting hormones. These improved rooting methods and chemicals are the result of a series of indepth studies on the physiological and biochemical basis of root formation in cuttings.

A second major method of cloning is by grafting. Research is direct to increase the success of grafting by reducing the major constraint to grafting commonly known as graft incompatibility. Basic physiological studies are underway to identify the causes for graft rejection and applied investigations are developing and testing improved methods of grafting to ensure better graft unions. The Forest Service is not currently involved in tissue culture research.

YCC and YACC Programs

Question: How will the proposed elimination of the YCC and YACC affect Forest Service programs?

Answer: Some work that had been done in the past will not be performed or will be accomplished at greater cost to the Forest Service. All outputs contained in the budget can be accomplished without these programs.

Question: Are these programs beneficial?

Answer: Both YCC and YACC are manpower programs. Their effectiveness in achieving objectives such as providing training and work experiences for particular target groups is not evaluated by the Forest Service. The Forest Service has, of course, received the ancillary benefit of having a considerable low-wage work force available that did not have to paid from its appropriation.

Question: How many participate in YCC and YACC?

Answer: In Fiscal Year 1981, 2,034 young women and men participated in the YCC program and 18,617 young men and women participated in the YACC program.

Question: What percent of the participants are disadvantaged?

Answer: In Fiscal year 1981, 60 percent of 1,227 YCC participants came from families with annual incomes of $15,000 or less and 30 percent or 5,494 YACC participants came from disadvantaged families.

Question: How many dollars of product are returned for every dollar expended?

Answer: In Fiscal year 1981, the YCC program had a $1 return and the YACC program had a $1.13 return on each dollar invested.

Research Budget

Question: Why is the Forest Service requesting a forest research budget which is considerably lower than FY 1982?

Answer: As a part of the overall effort to reduce Federal spending, priorities of Forest Service programs were carefully examined. Major considerations were cost/ benefit contribution toward strengthening the economy and opportunities to defer investments until economic conditions improve. By evaluating all research work units against a set of criteria, it was determined that several research projects could be terminated and others deferred without a significant short- term impact.

Question: Which research stations will be closed? Which research work units will be terminated?

Answer: The following research locations are proposed for closure by the end of FY 1983:

Bottineau, North Dakota
Beltsville, Maryland
Lehigh Acres, Florida
Sewanee, Tennessee
Fayetville, Arkansas
Lubbock, Texas
Reno, Nevada
Bend, Oregon
Marquette, Michigan

The following reseach work units will be terminated:

Fayetteville, Arkansas	Southern-1151
Arcata, California	Pacific Southwest-1206
Berkeley, California	Pacific Southwest-2201
Riverside, California	Pacific Southwest-1753
Ft. Collins, Colorado	Rocky Mountain-4151

Lehigh Acres, Florida	Southeastern-1113
Olustee, Florida	Southeastern-1115
Honolulu, Hawaii	Pacific Southwest-1752
Boise, Idaho	Intermountain-1208
Moscow, Idaho	Intermountain-2204
Alexandria, Louisiana	Southern-1115
New Orleans, Louisiana	Southern-4201
Beltsville, Maryland	Northeastern-1110
	Northeastern-1199
East Lansing, Michigan	North Central-1651
Marquette, Michigan	North Central-1102
St. Paul, Minnesota	North Central-2204
Starkville, Mississippi	Southern-1402
	Southern-2102
Missoula, Montana	Intermountain-2101
Reno, Nevada	Intermountain-1753
Research Triangle Park, North Carolina	Southeastern-2209
Bottineau, North Dakota	Rocky Mountain-1551
Durham, New Hampshire	Northeastern-1903
Delaware, Ohio	Northeastern-2212
Bend, Oregon	Pacific Northwest-1203
Sewanee, Tennessee	Southern-1105
Lubbock, Texas	Rocky Mountain-1713
Burlington, Vermont	Northeastern-1501
Morgantown, West Virginia	Northeastern-1702
Madison, Wisconsin	Forest Products Lab-3110
	Forest Products Lab-3199
Rhinelander, Wisconsin	North Central-1152

Question: Why has the Forest Service proposed to cut the McIntire Stennis funding which University Forestry programs depend on? Won't this disrupt Forest Service research?

Answer: The Cooperative State Research Service, not the Forest Service, administers McIntire-Stennis funding. These cooperative forestry research funds to universities are proposed for a 10 percent reduction in FY 1983. This reduction will not directly affect Forest Service research.

Question: What fraction of the research of the Pacific Northwest forest and range experiment station is devoted to problems east of the Cascades in Washington state? How much west of the Cascades?

Answer: For FY 1982, about 9 percent of the total budget for the Pacific Northwest Forest and Range Experiment Station is assigned to research units located in western Washington. About 2 percent of the budget is allocated to the one eastside location. However, portions of some research programs based in Oregon are directed to problems in Washington. Thus, the proportion of the total budget related to westside and eastside problems in Washington is somewhat greater than the 11 percent indicated above.

State & Private Forestry Programs

Question: Why has the Forest Service cut funding for State Private Forestry programs 25%? What specific activities in the Pacific Northwest will be affected?

Answer: The goal of the FY 1983 Budget is to reduce the role of the Federal government in the area of State and Private Forestry and to rely more on State and local governments. We are hopeful that the tax incentives the Congress put into effect will encourage small private landowners to accomplish some of the initiatives that were previously funded through direct Federal payments.

The reduction applies to all the cooperative programs so all cooperative forestry activities in the Pacific Northwest will receive less federal funding. The States and other local interests have the opportunity to increase local self-sufficiency in management and protection of State and nonindustrial private forests.

Road Construction Projects Discontinued

Question: Which road construction projects will be discontinued? What effect will this have on the safety of the user public?

Answer: We will build less roads designed to accommodate mixed traffic and all-weather conditions.

Safety of the public is one of the factors which is considered along with environmental and serviceability considerations in keeping down the cost of roads. One of the methods employed in consideration of user safety is to manage the use of the road, e.g., commercial and other public use can be separated on low class roads by allowing commerical use on weekdays and public use on weekends or by season of the year during which different classes of use are allowed.

Forest Fire Protection

Question: How much funding has been requested for forest fire protection activities? How does this amount compare to FY 1982?

Answer: $150,283,000 was requested for FY 1983. This compares to $139,498,000 in appropriations enacted to date in FY 1982.

Anadromous Fish Habitat Improvement

Question: How much has the Forest Service budgeted for anadromous fish habitat improvement in FY 1983? How does this compare to FY 1982?

Answer: The Anadromous Fish Program will be $3,850,000 and $2,992,000 in FY 1982 and FY 1983, respectively.

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